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ABSTRACT

In the past, the communication and paperwork structure between K-12 magnet/choice programs and the district-wide program administration was not efficient. In particular, the student application, selection, and notification processes were time-consuming, and did not enable school-based personnel to communicate effectively with district administration. This practicum paper reports on the design of an administrative database and telecommunications system and the implementation of a training program to allow for more efficient office practices. All magnet/choice program administrators and staff were required to participate in training, where customized databases were developed according to program-based needs, and where they learned about telecommunications for enhanced communications and electronic file transfer between school-based magnet/choice programs and the district administration. Training included intensive individualized sessions that introduced database format and manipulation as well as integrating telecommunications into office practices. Results revealed that the implementation and training strategies greatly improved the student application, random selection, and notification processes, and that efficiency levels and knowledge were heightened by the technology training and support. Administrators and staff viewed the entire process as much more manageable, with office procedures less complicated than before. Participants wished to continue the newly implemented processes. Thirteen appendices include checklists, participant log sheets and surveys, and technology summaries. (Contains 19 references.) (Author/SWC)

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The Development and Implementation of an Administrative Database, Telecommunications System, and Training Program to Improve K-12 Magnet/Choice Program Administrative Processes

by

Mary C. Black

Cluster 59

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A Practicum II Report Presented to the
Ed.D Program in Child and Youth Studies
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

NOVA SOUTHEASTERN UNIVERSITY

1996

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PRACTICUM APPROVAL SHEET

This practicum took place as described.

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April 29, 1996

Date

This practicum report was submitted by Mary Canny Black under the direction of the adviser listed below. It was submitted to the Ed.D. Program in Child and Youth Studies and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova Southeastern University.

Approved:

July 10, 1996
Date of Final Approval of Report

Mary Ellen Sapp
Dr. Mary Ellen Sapp, Adviser

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ABSTRACT

The Development and Implementation of an Administrative Database, Telecommunications System, and Training Program to Improve K-12 Magnet/Choice Program Administrative Processes. Black, Mary C., 1996: Practicum Report, Nova Southeastern University, Ed.D. Program in Child and Youth Studies. Staff Training/Administrative Database/District Technology Training/Telecommunications/Data Processing/Computer Literacy/Educational Leadership/Curriculum Development/Quality Initiatives/Random Selection Processes/Magnet Schools/Schools of Choice/Electronic File Transfer

This practicum addressed the finding that the K-12 magnet/choice programs existing administrative office processes were not efficient, and, as applicant and program numbers increased, the student application, random selection and notification process yielded an increasing amount of data collection and input errors and remained laden with paperwork and cumbersome inefficient tasks that placed time constraints on program administrators and staff. Previously implemented technology initiatives did not enable school-based personnel to complete procedures effectively or to communicate effectively with the district administration. Therefore, the writer designed an administrative database and telecommunications system and implemented a training program so as to create a more efficient and simplified student application, selection and notification system for the school-based programs and to allow for higher quality magnet/choice office practices.

The practicum design required all magnet/choice program administrators and staff to participate in training where customized databases were developed according to program-based needs and to participate in telecommunications training for enhanced communications and electronic file transfer between school-based magnet/choice programs and the magnet/choice programs district administration. Training plans included intensive initial and on-going individualized sessions that introduced database format and manipulation concepts and that integrated telecommunications into office practices. The design emphasized individual training, follow-up and on-going support as a means by which to achieve satisfactory outcomes. Continued communication and support enabled all participants to integrate newly mastered skills and concepts into regular workplace duties.

The resulting practicum data revealed that the implementation and training strategies greatly improved the student application, random selection and notification process and that by regularly providing technology training and support, efficiency levels and knowledge were heightened. Results indicated that administrators and staff viewed the entire process as much more manageable than previously and that office procedures were less complicated than previously. Participants related the many benefits that a customized database and telecommunications system offered and a preference to continue newly implemented processes, which the writer views as contributing to the practicum's success.

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CHAPTER I

INTRODUCTION

Description of Community

The writer is currently employed in the southeastern region of the United States. Compared to other counties in the state, this county is the most densely populated. The county reflects a growth rate of 44% over the last 10 years, and it is still growing. In this state, the school districts are divided by county, with this district being comprised of 118 regular public schools, 8 exceptional education schools and centers, 27 alternative education centers, 2 discipline centers, and 11 vocational and adult/community schools. These schools serve approximately 134,429 students, making the county the 7th largest district in the state and the 22nd largest district in the nation. The district serves a school population which is 76.87% white, 18.17% black, 2.49% Hispanic, 2.32% Asian, and .14% American Indian. Due to a federal court order on desegregation, the district strives to be representative of the overall population, creating a diverse population

among the student bodies. In order to fairly represent all cultures, the school staffs provide unique opportunities for multicultural awareness and diversity in educational practices and delivery.

Writer's Work Setting and Role

The writer's current work setting is within the magnet programs and programs of choice department at the district administration. The department includes county-wide off-site programs and on-site magnet/choice programs. Partially due to federal desegregation laws and partially due to the public's demand for choice in public education, magnet/choice public schools have become increasingly important within the county's educational system. The district administration and the school-based principals, assistant principals, and staff coordinate the magnet/choice programs. Fifteen of the magnet/choice programs reside within the district's elementary, middle, and high schools, and two schools are self-contained sites.

The writer's specific role is that of program coordinator for a district-wide program designed for student field-based education. The program's philosophy lies in the domain of experiential education, and the program provides

the opportunity for academically talented and motivated high school juniors and seniors to reach beyond the formal education of the classroom and to experience a unique integration of theory and practical application within the professional setting. For the portion of the school day they spend in the internship program, students receive high school academic elective credit, junior college professional development dual-credit, post-secondary survival skills, and, moreover, hands-on experience in the professional work setting. Because of the nature of the writer's job as a program coordinator and as an educator, the position allows the freedom to travel throughout the district and to work with the business and the school communities, while still having student contact both in and out of the classroom. Also, the writer, with specialized technology skills, has the unique opportunity of assisting magnet/choice program personnel with technology concerns.

CHAPTER II

STUDY OF THE PROBLEM

Problem Description

Magnet/choice programs are self-contained programs that report directly to the district administration department supervisor. They are responsible for maintaining accurate student and program records and for communicating with the district administration. In the past, the communication and paperwork structure between the magnet/choice program district administration and the district-wide magnet/choice programs was not efficient. Of particular importance was the student application, selection, and notification process which inundated magnet/choice program personnel with paperwork, which was time consuming, and which did not enable school-based personnel to communicate effectively with the district administration so as to enable processes to flow smoothly and efficiently.

Magnet/choice programs utilized manual processes as a means by which to compile student application data and by which to communicate with the district administration.

Since the inception of the magnet/choice program education concept, the elementary and middle school guidance counselors, who each serve up to 250 students, were responsible for historical data collection, verification, processing and for developing student information packets which were distributed to the magnet/choice district administration office for verification and for further distribution to appropriate magnet/choice program directors. The program directors at the next school level were then responsible for the magnet/choice program student selection and notification processes, which entailed a great deal of time being utilized in county-wide meetings so as to manually collate student data and compare application status lists while maintaining school-based program responsibilities.

Once application status lists were updated, the final lists were hand delivered to the district administration for randomizing the lists of accepted students. The randomized lists were then hand delivered to the schools, and program directors notified students by letter indicating acceptance, rejection or wait list statuses. Program directors then awaited student acceptance or denial before meeting to update lists for final processing. An attempt at implementing a technology-based system was initiated but

failed, and, therefore, the application, selection and notification processes remained laden with paperwork and cumbersome, inefficient tasks.

As the number of students who apply to magnet/choice programs increased, the application, selection and notification processes yielded an increasing amount of data collection and input errors which created school-based and administrative problems aside from the obvious time-constraints placed on all staff. The personnel involved in the application, selection and notification processes are salaried and receive no additional supplements allotted for the extra duties which the current system requires. Because all school and administration personnel have full-time positions, the collation, distribution and processing of student information became an additional job challenge. The existing processes impeded the counselors and program directors from expeditiously processing student information and applications, from pursuing acceptance procedures, and from completing regular job duties in a timely and effective manner.

In short, the problem to be solved in this practicum was that the magnet/choice programs' existing student application, selection, and notification process was not efficient.

Problem Documentation

The magnet/choice programs are closely supervised by the district administration supervisor who recognized the need for progressive technology enhancements within the application, selection and notification processes. The magnet/choice supervisor obtained assistance from a technology-oriented department at the central administration so as to implement a technology-based system which would create a more efficient student application, selection and notification system for the on-site magnet/choice programs. At the conclusion of the technology implementation, the magnet/choice program central administration supervisor indicated that the attempt at instituting a technology-based process failed, only to create additional manual work and frustration for school-based and central administration personnel.

Informal interview-based needs assessments, carried out by the magnet/choice programs' supervisor and then informally verbally related to the writer, indicated a range of problems leading to the technology implementation failure. Nine of 17 program administrators indicated that software application difficulty and only one software training session left staff unable to fully utilize the implemented software. Twelve of 17 program administrators indicated that the generic database design did not meet the

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needs of specific magnet/choice programs. Nine of 17 program administrators indicated that because of software application difficulty, data input fell behind schedule and subsequent processes fell behind schedule up to 3 weeks. Student randomization, acceptance, wait and rejection lists and notification for 7 of 17 of the programs were delayed due to data input delays. Merged data, including school name, address, phone number, and student status on student notification letters for 7 of 17 of the programs were incorrect. Three incidents of conflict occurred between the trainer/technician and the central administration as administration encouraged the implemented process to be expedited. The notification and selection processes were completed manually by magnet/choice program administration and staff beyond the scope of the regular workday and on weekends so as to compensate for lost time. Initial and final information transfers for 17 of 17 of the programs were completed manually rather than electronically.

Causative Analysis

That the magnet/choice program student application system remained manual and inefficient because of the technology-based implementation failure may be primarily

related to eight factors. First, the trainer did not plan for or provide ample training sessions for difficult application software or for on-site training and support for program administrators or staff. The trainer assigned to the magnet/choice programs technology implementation offered a single 4-hour training session to all personnel who would utilize the software and manipulate data at the on-site programs. By initiating a large-group session with the personnel, the trainer did not allow for the individualized attention and learning that is essential to mastery of new concepts and processes. By providing the learners with only one training session, the trainer demonstrated only general software features without making any direct reference to the individual processes and practices to be mastered. Therefore, the program personnel were left with a brief training session and no indication that on-going program-specific training would be provided as is necessary when implementing new, complicated software and processes and procedures.

A second factor leading to the implementation failure was that the trainer/technician implemented a generic database rather than customizing the design to meet each program's needs. Each of the magnet/choice programs has the need to account for data as relevant to the specific

program. However, the trainer provided all personnel with a generic database which was programmed to draw information from the central administration mainframe so as to complete student records. The generic format did not include enough information for the school-based program offices to function properly, and much of the information drawn from the central administration mainframe was outdated and incorrect causing the program staffs to spend a great deal of time updating and correcting information in an already difficult software application. If the trainer had provided individualized training and customized databases, then each program would have had the opportunity to create a database which included current information as relevant to the purpose of each program and which provided current student information.

The third factor leading to the implementation failure was that on-going school-based technological support was only provided when requested, and then sporadically, which caused data input to fall behind schedule. Again, if the trainer had provided each magnet/choice program staff with the information and tools to design customized database formats, then the staffs would not have spent a great deal of time learning the software processes or updating and correcting information from the mainframe and the timelines would have been met at a greater efficiency rate. And, if

greater learning opportunities had taken place, then the staffs would have spent a minimal amount of time inputting student data, and time would have been available to concentrate on other database and program functions.

The fourth factor was that proper training and project follow-up were not provided by the trainer causing delays in generating student randomization, acceptance, wait, and rejection lists and notifications. Because the trainer did not provide any formal post-training instruction, magnet/choice program offices were unable to meet central administration deadlines and subsequently fell behind schedule in all required functions. Each program was responsible for generating student grade level lists which were to be forwarded to central administration for randomization. The randomization serves the purpose of randomly selecting qualified students for placement on acceptance, wait and rejection lists. However, because magnet/choice program offices were spending an exorbitant amount of time sorting through the database information and processes, they were unable to meet the scheduled timelines and student lists were generated far behind schedule.

Once the randomized lists were generated, the fifth factor related to the implementation failure became apparent. Because the trainer did not closely examine

inherent program differences and insisted upon generic rather than customized formats, merged program data and student status on notification letters were incorrect. The trainer did not account for individual program differences and styles, and therefore, did not pay heed to the specific letter formats required by each program. Consequently, the trainer generated over 700 incorrect status letters which were sent to students and parents. Because of this error, all student status letters had to be reprinted at great cost to each program and school, and central administration personnel spent a great deal of time accounting for the many problems that were created from the incorrect letters being sent.

The final factors relating to the technology implementation failure were in direct relation to the trainer's lack of program understanding and lack of communication. The sixth factor was that the trainer made no periodic, on-going reports to central administration as a means by which to account for activities, progress, and meeting deadlines, and therefore, conflict occurred between the trainer and the central administration supervisor when final deadlines were to be met. Because the trainer did not regularly communicate the implementation progress, and when asked, reported to central administration that processes

were progressing, the central administration believed that all processes were being completed in a timely manner. However, processes were far behind schedule, and it was not until questioned by central administration that the trainer finally communicated that all schedules were behind and that abundant errors occurred.

The seventh factor in the implementation failure also related to poor communication and lack of program understanding. The trainer's gross negligence in reporting accurate program progress and process status caused central administration and program staff to complete processes on weekends and after work hours. This work was necessary so as to make up for process delays and to remediate the problems that had occurred with the incorrect letters being sent. Finally, because of the many flaws at the fundamental implementation level, electronic data transfer was not attempted.

Relationship of Literature to the Problem

Professionals have indicated that plans to improve existing structures must be strategically planned, well-organized and include regular and open communication in order to be successful. Farley (1992) related that projects

that require technology utilization training must be based in a well-organized plan with the plan heavily considering support services after initial training initiatives and on-going communication as follow-up training; otherwise, technology initiatives will fail. Technology projects require that offices that might not normally communicate become integrated into a system that fosters user and trainer compatibility, and in work structures where compatibility may not be readily apparent, it is the technologist's task to build the bridges that unite office structures into a broader technological and human context that promotes efficiency and effectiveness. When the technologist does not encourage and model open communication, efforts that might have proved effective and efficient will only lead workers to experience frustration and increased workloads.

A concern with providing on-going support and follow-up when training individuals with technological advances and with workplace changes is expressed in current literature. Richie (1994) indicated that in order to provide for and sustain user satisfaction, various departments or areas must seek an internal commitment for better service as service is the underlying factor to successful enterprises. In technological undertakings, developing a strong commitment

entails fostering honest and open relationships where the user is confident that the technology trainer will put forth the greatest effort for the user so as to accomplish a unified goal. From the technologist's standpoint, the unified goal must be to create a work environment that models efficient practices, that fosters creative technological undertakings, and that supports technological endeavors with technical and technological support. When the technologist neither promotes nor models that unified goal, workers soon find themselves lost in new processes, regular work practices become delayed, process accuracy suffers, and conflict ensues.

A primary vehicle for successful technological implementation into the workplace is to consider the viewpoints and needs of the users in the environment. Richie (1993), in applying Dr. W. Edwards Deming's systems theory, found that by seeking input from users, continuous program, system and design improvements inherently become focused on user needs. The technologist must convey a sense of interest in the users and that is accomplished by including users in development and on-going revision processes. Technologists have a fundamental understanding of the necessary equipment and processes that make the workplace successful; however, evidence reveals that without

input from users, the technological aspects may become overly complex or confused with the reality of workplace needs and stray from actual workplace practices. Often technologists and development engineers are removed from the user environment and without input from users, designs and implementations may not completely fill the needs of the user environment. The successful technologist carefully considers user input, carefully designs implementations to meet user needs, and maintains on-going support and communication with users so as to integrate post-training input into on-going revision and development processes. Without proper consideration of the user and user environment and without continually improving processes, initiatives become delayed and projects fail.

The need for technology advancements in education and for providing quality service to users is supported by literature. Educational leaders must provide staff with quality training and skill-building opportunities so as to become more efficient and productive and to encourage smarter working habits without depleting the human and physical resources which may be spent benefitting children (Donaldson, 1993). As computer communications and computer networks become increasingly important in all settings, including the educational setting (Vasu, 1990), it is not

without a great deal of change that technological innovation takes place. For technology to play a role in the educational setting, practical and relevant educational experiences must be provided for staffs and integrated into common practices so that technology will be perceived as a means by which to accomplish tasks and by which to foster creative endeavors. When technology experiences do not meet the needs of programs or user environments, processes become confusing and users become lost in irrelevant and unsuccessful initiatives.

With today's technological advancements, leadership in determining the manner in which technology is implemented, rather than focusing upon the intrinsic characteristics of the technology itself, plays a critical role in the success of educational technology (Kearsely & Lynch, 1992). However, technological innovations will not be readily accepted unless training and support are provided as part of the regular work day. The educational technologist must assist administrators, educators and staff with technological change and assist them in becoming more confident workers so that their time is spent where it is needed rather than in focusing upon technology itself. The educational technology leader understands inherent needs within the educational settings and is committed to

providing educational facilities with the physical components and knowledge that will lead to more progressive and relevant educational practices.

Specific causes for poorly organized technology implementations, for communication breakdowns and for slowing progress with technology are revealed through literature. Often technology departments are separated from other educational departments and therein lies a great deal of uncoordinated effort. Reneke (1994) found that having specific individuals in separate and different technology areas results in situations where people often do not coordinate their efforts with other sections of a school system or articulate goals so as to avoid duplicated or ineffectual efforts. When departments work independently there is a greater chance for projects to become more specifically oriented to individual departments rather than for the betterment of the overall institution. And, in situations where departments function independently, training efforts are often not designed to include entire institutions or the efforts do not appear to offer benefits to all.

Raebeck (1994) related that when people are asked to perform in areas which they feel there is not a good chance of success or circumstances leading to something better,

then that is asking too much. Concern with thoughtfulness, care, and quality often promote performance and vision (Raebeck, 1994). But the organizational structures which promote concern and thoughtfulness do not always exist in traditional Western institutions. Richie (1993) examined traditional Western organization charts and found that educational technology service centers often view themselves hierarchically rather than as systems concerned with quality service and quality management. Therein lies the concept of separate and unequal within institutions rather than promoting a concept of unification toward reaching specific organizational goals.

If institutional departments are viewed as distinct from others then communication will suffer, poorly organized efforts will repeatedly occur, and technological progress and transformation will be hindered at the onset. Raebeck (1994) related that in order to proceed through any transformation in the workplace, the essential element is attitude. And attitude is the one factor that can bring an institution to the cutting edge of technological innovation; however, the attitude must be that of communication, progressive thinking and organizational structure that promotes equal access and training throughout the institution or the effort will fail.

The topical areas touched upon in the literature are broad. In today's technological workplace immediacy and efficiency are key to successful enterprises. Langhoff (1993) indicated that we live in an age of immediate gratification and that business must be able to be conducted wherever and whenever the clients specify. Vasu (1989) stated that today computer technology has emerged as an important element in a growing variety of fields. The field in which this holds true is for educational institutions as the demand for information is as great in educational institutions as in business-related fields. On a daily basis parents and guardians request information about their children, students seek subject-related information and teachers seek ways in which to bring the information age into the classroom.

However, this immediacy must not lose the human element. Reneke (1994), in relating a new approach to planning, stated that to meet office needs, a complete reengineering must be directly related to what the organization is trying to accomplish rather than focusing upon speeding data collection and retrieval. Therefore, the educational institution of tomorrow must be well-equipped and well-trained and must have a specific focus and emphasis as to technological needs in relation to organizational

goals. However, this will only be accomplished by communicating between departments, by focusing upon specific educational technology needs and by providing the training and support which are inherent to successful technological innovations and enterprises.

Chapter III

ANTICIPATED OUTCOMES AND EVALUATION INSTRUMENTS

Goals and Expectations

The writer had two goals. The first goal was to assist the magnet/choice school-based personnel in improving the student application process by developing a technology-based student application, selection, and notification system. The existing methods yielded increasing amounts of data collection collation and errors and created additional problems aside from the already cumbersome, time-consuming and paper laden process. The writer's second goal was to develop an effective means of electronic data transfer between school-based magnet/choice programs and central administration.

Expected Outcomes

At the conclusion of the 8 month practicum implementation period, the following outcomes were expected:

Outcome 1. The implemented software would be fully utilized by at least 15 of the 17 magnet/choice programs.

Outcome 2. Of the 17 program administrators and additional staff, all participants would indicate that the chosen customized database design or the generic database design met the specific program's needs.

Outcome 3. Of the 17 program administrators and additional staff, all participants would complete database data input according to central administration scheduled timelines.

Outcome 4. At least 15 of the 17 programs would supply central administration with student information for student randomization, acceptance, wait, and rejection lists according to central administration scheduled timelines.

Outcome 5. Merged data on student notification letters, including school name, address, phone number, and student status, would be correct 100% of the time.

Outcome 6. No incidents of conflict would occur between the central administration and the trainer as all processes would be expedited and completed.

Outcome 7. The notification and selection processes would be completed within the regular workday 100% of the time.

Outcome 8. Final information transfers would be completed electronically 100% of the time.

Measurement of Outcomes

The writer intended to evaluate progress and mastery with a variety of measures and tools. The outcomes were to be measured as follows:

Outcome 1. Full software utilization was to be measured by indicating on the Database Utilization Checklist (see Appendix A) the extent to which the database was fully developed and to which database records and fields were manipulated. The writer intended to randomly select databases from the program files and complete a Database Utilization Checklist for each magnet/choice program during final on-site visits with program administrators and staff.

Outcome 2. A Database Format Satisfaction Survey (see Appendix B) was to indicate user satisfaction with the customized or generic database format and was to indicate suggestions for future design.

Outcome 3. The Time Line Check Sheet (see Appendix C) was to be utilized to determine program administrator and staff progress in meeting all central administration timelines for data input completion.

Outcome 4. The Time Line Check Sheet (see Appendix C) was to be utilized to determine program administrator and staff progress in meeting all central administration

timelines for transfer of student application lists to central administration for student randomization and acceptance, wait and rejection list selection.

Outcome 5. During on-site visits the writer was to randomly select merged letters from program files, and utilizing the Letter Merge Checklist (see Appendix D), was to ensure that student notification letters included correctly merged student information and status, and correct school information and program content.

Outcome 6. A Communications Log (see Appendix E) was to measure the trainer's open lines of communication with central administration and program administrators and staff and was to indicate no incidents of conflict. A Technology Support and Visitation Log (see Appendix F) was to measure the trainer's on-going support with central administration and program administrators and staff.

Outcome 7. The Time Line Check Sheet (see Appendix C) was to be utilized to determine program administrator and staff progress in meeting all central administration timelines for completing all processes within the regular workday.

Outcome 8. Successful electronic information transfers were to be measured by the Electronic Information Transfer

Checklist (see Appendix G) as central administration received electronic files via telecommunications.

The Student Selection Processes Post Survey (see Appendix I) was developed as the implementation progressed to determine opinions of the electronic information system and transfers as well as opinions of the trainer's efforts and the overall training and student selection process.

CHAPTER IV

SOLUTION STRATEGY

Discussion and Evaluation of Solutions

The communication and paperwork structure between the magnet/choice program district administration and the district-wide magnet/choice programs was not efficient, and as the number of programs increased, application processes yielded increasing amounts of data collection and input errors that created problems aside from the already cumbersome and paper-laden manual process. An attempt at instituting a technology-based student application, selection and notification system failed, only to create additional manual work and frustration for school-based and central administration personnel.

Authorities (Cousins, 1994; Donaldson, 1993; Horn, 1986; Langhoff, 1993; Rowe, 1994) suggested that customized technology training and utilization, on-going support and communication, and individual practice are imperative to successful office/program management in today's educational setting. Fully integrating technology into the education office structure requires initial and on-going support and

training which results in more efficient, competent and productive workers. Donaldson (1993) related that in order to become more productive and efficient in the workplace, employees must be taught to work smarter rather than harder. Working smarter entails learning the technologies that are designed to make the workplace more efficient; however, it is not without user support that complicated software packages are mastered and then become the catalyst for productivity. Users in the typical workplace are not concerned with technology in and of itself; they must accomplish specific job tasks without being concerned with the technological aspects of software and hardware. Therefore, it is only through technology training and on-going user support and communication that the office worker is educated and enabled to efficiently accomplish complex tasks in a competent and productive manner.

Reneke (1994) urged technology managers to put computers on the most productive workers' desks as others will then take notice of the improved productivity that is realized with technology. When workers utilize technology, cumbersome tasks become less of a burden and workers are able to concentrate on more important workplace issues and tasks. However, successful integration of technology into the workplace requires that others also recognize the on-

going processes involved in technological innovation. Workers who do not regularly utilize technology must see that technology integration includes instruction and practice as well as on-going support for users. Improved productivity does not occur only by virtue of having a computer on each desk, but it does occur with great efforts taken by all trainers and employees involved in upgrading productivity and competency.

Successful office and program management also encompasses a broader view of the organization as a whole. In many instances workers have access to technology through centralized systems where support and user design occur in segregated departments within the organization. Johnson (1995) asserted that centralized computing does not meet the needs of individual sites, and, therefore, computer distribution and application design must be developed with each site's goals and priorities in mind. When centralized computing exists within an organization, workers invariably do not recognize and understand the foundation of user support and the control that users have over their own productivity. Centralized computing is designed to keep the locus of control within single departments and typically focuses upon the technology department's needs and goals rather than on the needs and goals of the organization and

workers as a whole. On the other hand, distributive computing focuses upon the organization's priorities and goals and upon shared knowledge and support throughout the organization. In organizations where technology hardware and software design exist within a distributive computing environment, it is likely that workers' needs and the needs and goals of the organization are being met with user support and open lines of communication so as to foster a sense of productivity and technological competence. In the distributive computing environment, management's role is to encourage workers to utilize technology to accomplish work duties and to seek innovative means of production, while depending upon the distributive support in achieving organizational priorities and individual growth.

To fully implement technology within a distributive computing environment, technologists are responsible for obtaining designs from within the user environment and then developing and implementing adequate training programs and support which result from user concerns. Cousins (1994) stated that in order to fully implement a computer training program for administration and staff, it is critical that use and user feedback be considered so that needs are met. Horn (1986) reported that effective technology training and individualized user support generate increased business

office productivity and enhanced technology-based knowledge that assists with other office tasks. Exceptional management and training programs not only consider user skills and organizational priorities but also build upon that foundation so as to develop programs that provide initial training, on-going support and training, and technology hardware and software upgrades and updates that assist with the overall goals of the office and organization.

Effective leadership and open communication provide support to personnel involved in technological innovation. Kearsley & Lynch (1992) stressed that leaders must influence school cultures, and in order to fully and successfully implement technology into the educational workplace, leaders must be able to create new visions of improvement that other organizational members can believe in and act upon. Modeling innovation and allowing users to have input into innovations enables educational leaders to emphasize the positive effect that technology can have on office and educational procedures and through implementation, users are able to act upon the innovation. But this can only be accomplished with open communication and by ensuring users that their concerns will be addressed quickly so that continued innovation and productivity may occur. Langhoff

(1993) related that open communication is imperative to successful enterprises and that various studies have indicated that having a pager greatly increases the chances that calls will be received and completed to 90 percent. In the educational setting, technologists must respond quickly to users' concerns so that continued creativity and continued technology utilization will occur. When educational technologists carry pagers, questions are often addressed more quickly and frequently and users are then able to complete projects within a planning period or within the work day which not only enhances but also improves procedures and outcomes.

Rowe (1994) asserted that technology brings about new forms of perception, awareness and change which requires more democratic teaching and learning methods. When new technologies and methods are implemented and supported, workers are given opportunities that are only bound by their own sense of creativity and productivity within the work setting. Here, leaders offer workers limitless visions of improvement and accessible communication and support, workers are more able to develop new ways of accomplishing tasks, and they become more aware of the methods that will bring about workplace change. The effective leader empowers workers with insights and personal perceptions about newly

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developing work skills and an awareness that each worker has a positive effect upon the workplace. Technological innovation is reliant upon effective leadership that is proactive, and that is accomplished by creating systems that promote success at every level during the concept and design phase. The technologist must collaborate with the customer to ensure that appropriate needs are met (Kaufman, 1990). Therein lies the challenge of educational technology and technology leadership. Kofsky (1990) related that by involving administrators in data entry and related technology processes, office procedures can be greatly improved. All users and workers must be included in technological innovation so that improvements are understood and practiced at every level within the organization. It is only through exclusion, a lack of awareness, and a lack of technological training and support that users do not fully comprehend the changes that technology can bring to an organization.

Of the most dramatic changes in the workplace, telecommunications plays a leading role in how organizations function. Telecommunications utilized for electronic transfer of information enables office communications to transpire with less paper-swapping, less effort and more efficiency. Telecommunications enables organizations to

reach a greater audience while maintaining greater productivity levels. Olia & Martin (1994) stated that telecommunication systems are becoming an increasingly important part of our lives as telecommunications has the capability of enhancing communications and interactions both socially and educationally. Today telecommunications offers users the ability to reach into areas of the world previously out of reach and to obtain information and knowledge quickly and effortlessly.

Vasu (1990) related that telecommunications is becoming a critical element in increasing personal and organizational productivity, and Robottom (1987) asserted that by accessing the complex array of knowledge and information offered by telecommunications, individuals and organizations will have broader opportunities to organize and control access to information, which lends greater power to their operations. Because a world of information is accessible to individuals through telecommunications, productivity rises as processes occur behind the scenes and information compiles while workers busy themselves with other tasks. Carmona (1995) asserted that communication technologies are not only rapidly enhancing and changing our ability to understand and manage our work environment but also provide great potential within the educational setting. Utilizing

telecommunications enables users to pursue other activities while the technology compiles data and retrieves information that may later be utilized as student projects, teacher projects, or as data within educational office structures. So as to plan for tomorrow's educational technology needs, West (1994) contended that telecommunications is an essential component in providing for administrative functions. Telecommunications gives administrators the ability to compile data, to communicate with other administrators and staff and to effortlessly and efficiently share information without relying upon paper-swapping and ground transportation. That in itself offers educational institutions a world of communication that will alleviate cumbersome practices and inefficient usage of workers' time.

Technology leadership is essential to bringing educational institutions and organizations in the 21st century and to providing users with on-going support and training. Effective leaders provide users with constant feedback and opportunities to enhance work practices with additional creative and innovative practices. Such practices enable organizations to move forward in a rapidly changing technological society, and provide users with the tools to seek and find information, and to compile data with minimal effort. However, without the proper leadership and

training opportunities, technology will only become an additional burden to the user and will result in additional work-related stress and a great loss in productivity. Technology offers a means by which to provide users with the tools to move forward educationally as well as in productivity, and when organizations support educational advances, users are more apt to continue to produce for the organization and to develop practices that lead the organization forward.

Description of Selected Solution

As a result of reviewing the literature, the writer viewed implementing technology-based processes into the district-wide magnet/choice program offices as essential to alleviating paper-laden and cumbersome processes created by manual completion of tasks that are more efficiently and effectively accomplished with technology. Based on the assertions of Donaldson (1993) and Kaufman (1990), the writer designed and implemented a technology-based student application, notification and selection process for magnet/choice programs intended to enable program administrators and staff to develop necessary technology skills and to competently and efficiently complete office

tasks. Program administrators and staff needed to be offered sound technology training and on-going support and communication so as to enable them to complete the manual, cumbersome, and paper-laden tasks with minimal effort and greater efficiency so that their energies could be spent completing regular job duties in a timely and efficient manner. Following the patterns of Johnson (1995), Kearsely & Lynch (1992), Langhoff (1993), and Rowe (1994), the writer promoted communication through proper leadership strategies. The writer designed technology-based training programs that enabled magnet/choice program personnel to competently utilize databases so as to meet all timelines, to input data efficiently and effectively, to create merge files for letter notification, to complete all administrative functions and processes in a timely manner, and to electronically transfer information to and from central administration.

The writer took the following steps to provide specific technology-based processes for magnet/choice program personnel:

1. Distributed a Needs Assessment (see Appendix J) so as to determine the areas deemed critical for program development, training time, existing hardware and software, and to determine the number of participants (Cousins, 1994)

2. Developed a generic database design for programs where a customized database design would not be utilized

3. Developed and led training sessions wherein database utilization skills as relevant to the application process were discussed, modeled and practiced (Horn, 1996)

4. Provided on-going school-based technology support and provided instruction and on-going support in merging information between word processing documents and database records so as to ensure that all student letters were correct

5. Provided central administration with regular communication regarding activities, progress and timelines (Langhoff, 1993)

6. Ensured that all processes were mastered by all school-based participants

7. Ensured that school-based personnel were satisfied with utilizing all technology processes and instruction (Cousins, 1994; Horn, 1986; Kaufman, 1990)

8. Provided individual electronic communication instruction to prepare personnel for electronic information transfer, as authors' indicated that telecommunications are integral to administrative functions and productivity, (Carmona, 1995; Vasu, 1990; West, 1994).

Report of Action Taken

Month One

At the onset of the implementation period, the magnet/choice program principals, assistant principals and coordinators met with the central administration supervisor, the supervisor's team and the writer. At that time the intentions of the new student application system implementation were discussed and compared to the previous student application system. Program administrator concerns were taken into consideration, and many questions regarding the new process were answered. It was explained that the new Microsoft Works software was purchased for ease of use and because the software would read Microsoft Works files in either IBM or Macintosh format. Then, the Needs Assessment (see Appendix J) was distributed. All program coordinators were given one week to complete and return the needs assessment to the writer.

While awaiting receipt of the needs assessments, the writer began learning both platforms of the software that was purchased for the new training initiative. As the writer's software learning progressed, the writer realized that the magnet/choice program personnel would benefit from

a condensed training manual to augment the much more lengthy manual that was purchased and included with each software package. Therefore, the writer developed an abbreviated training manual for Microsoft Works 4.0 for the Macintosh (see Appendix K) and for Microsoft Works 3.0 for Windows (see Appendix L). These were developed so that the individuals being trained would have a summation of the steps required to complete the program database, and developing the manuals also assisted the writer in determining an effective, relevant, and step-by-step manner in which to lead the training. Once the needs assessments were received, it became clear to the writer that the learner level for the training would, for the most part, be novice, and the training manuals would become integral to supporting the trainees when the writer was unavailable to provide support.

Throughout the first month and while compiling needs assessment information as it arrived, the writer began designing a generic database format. As the needs assessments were returned to the writer though, it became obvious that there was no need for a generic database format as all programs identified a customized format as the desired format. Therefore, the writer began to collect program applications and planned to bring the applications

to each training as a database field selection guide for the trainees. Also, the writer deemed it necessary for the programs to develop a page layout, or form, that resembled the application so that greater speed could be achieved when inputting data. This was discussed with the magnet/choice program supervisor, and the writer proceeded with the training plan.

Also, during the first month of implementation, the writer began to develop a schedule for small group training sessions and for on-site individual program training sessions. However, as needs assessment data was compiled, the writer abandoned the initial plan to hold small group training as all programs indicated that individual sessions would be preferred to small group sessions. Once becoming more familiar with the requirements of the magnet/choice programs, it became clear that individual needs would be better addressed with individual meetings as all training would be specific and relevant to each program at each training session.

When all of the needs assessments were received, the writer finalized a database for the central administration supervisor indicating hardware and software needs for the magnet/choice programs. The central administration supervisor reviewed the recommendations with the writer and

once budget allowances were determined by the central administration supervisor and her supervisor, the hardware and software orders were placed for the programs.

The writer had intended to deliver all new hardware to the individual programs when received; however, because of the magnitude of the order being placed and because the writer concurrently held a full-time position within the district, it was decided by the writer and central administration supervisor that all orders would be submitted by and delivered directly to the individual magnet/choice programs. Then if needs arose in hardware set-up, the writer would assist during the scheduled training sessions. The software, though, was forwarded to the writer as requested by the writer, and the writer planned to install software as part of the training initiative so as to enable school-based personnel to learn the process from installation through utilization.

At the conclusion of the first month of implementation, and after conferring with the central administration supervisor, the writer began to schedule training sessions with those programs already prepared for training. Two of the 17 programs owned the software to be implemented, and they were immediately scheduled for training to begin at the onset of the second month.

Month Two

The second month of the student application process implementation began with training individuals at their home schools and with scheduling additional training sessions as hardware arrived to the schools and as software arrived to the writer. The high school magnet/choice programs were the first group to be trained as the high school application deadline was at the beginning of the fifth month of implementation and the high school data input and student selection deadline was within two weeks after the data input deadline.

The writer initially intended to train one program per day for 2-1/2 to 3-hours in the morning hours. However, the writer soon realized that a great deal of flexibility was going to be needed to meet the programs' training needs. First, after two 2-1/2-hour training sessions, it became obvious to the writer that far greater time was needed in order to leave the personnel with a full and working understanding of the software program concepts. This shortage of time occurred for a number of reasons. School-based program personnel had many questions, needs and concerns beyond the scope of software training, and the writer found that in order to gain their confidence, it was necessary to assist with many other school-based

programmatic and technology-related details aside from the training itself. Therefore, the writer began to schedule training sessions with a more flexible schedule and with the intent to offer follow-up training to the programs. After the first three training sessions, the writer requested each program trainee to reserve up to 4-hours for the training session. The writer also explained that anything not accomplished in the 4 hours would be accomplished in follow-up sessions.

Also, during the second month of implementation, the central administration supervisor arranged an appointment with the writer, and the supervisor's team and supervisor, the associate superintendent for curriculum and instruction, so as to discuss the writer's findings for a telecommunications system for magnet/choice programs district wide. The writer had previously investigated different telecommunications plans for the 17 schools, and had reported these systems to the central administration supervisor; then one system was decided upon as being the most efficient, the most cost effective and the most practical and expandable for magnet/choice program purposes. The writer and the central administration supervisor presented their findings to the associate superintendent.

The telecommunications system findings included a moderately-priced Apple computer file server which would eventually enable nine callers to be on-line at one time and which would allow for synchronous and asynchronous communications. Asynchronous communications included sending and receiving files to magnet/choice personnel, electronic mail use, and communication via bulletin boards and folders specifically designed for different level schools and programs. Synchronous communications include chatting and conferencing capabilities which would ultimately enable school-based personnel to have live communications with one another without having to travel to central administration for the meetings. These features are basic to the system, and as the system is integrated into magnet/choice program processes, other capabilities and expansion will be realized and utilized.

At the meeting, the system purchase was approved and it was decided that all magnet/choice program offices would be queried to determine telecommunications hardware needs. Therefore, the writer accepted another aspect of the implementation that was not previously included in the overall plan. The writer had information regarding telecommunications needs from the needs assessment; however, after determining a specific telecommunications system, it

was necessary to revisit telecommunications needs and to ensure that all magnet/choice programs were in fact equipped for the new system. The writer accomplished this in three ways. First, the writer compiled data from the needs assessment. The writer then began phoning the programs to ensure that what had been indicated as existing equipment or needs was in fact correct. Then, the writer confirmed findings while visiting the sites for database training. Finally, the writer elicited the assistance of the central administration supervisor's secretary to compile and finalize the results of the telecommunications equipment survey. The writer determined which modems would be required for different systems, the secretary organized and typed the purchase order, and the telecommunications order was placed within two weeks. The writer intended to accept delivery of the telecommunications equipment so as to account for the equipment, to install the equipment at each magnet/choice program, and to ensure that all needs were met before telecommunications training and use began.

The second month quickly became very labor intensive. However, a progressive telecommunications system and a model student application and selection process were beginning to develop.

Month Three

Throughout the third month, the writer continued to train individuals on-site. With the exception of two programs, the high school programs became very independent in their use of the new software package. The writer maintained communication either by visiting or by phone with these programs, and the training initiative appeared to have enabled many of the programs to become independent and self-sufficient users. However, with two high school programs, the writer made many visits and assisted for many hours by phone. Any one of many reasons could have caused this dependence: either the program secretaries felt more comfortable being "walked through" processes; the program secretaries may have become dependent upon the writer; the program secretaries did not take the initiative to utilize the Microsoft manuals provided for them; the program staff may not have had ample support previously; or it is possible that by contacting the writer, the secretaries were seeking an easier manner in which to accomplish their tasks. Nevertheless, the writer continued to provide support for the secretaries and provided follow-up communication and support for all high school programs throughout the data input process while building strong communications and relationships between the central administration office and

the school-based sites.

After ensuring that the high school programs were proceeding as desired with the data input stage of the student application process, the writer began scheduling and training middle and elementary program staff. The middle school and elementary staffs would not be receiving student applications until the sixth month of implementation; however, the writer proceeded with full training sessions with the understanding that intense and individualized follow-up review training sessions would be held when applications were received as well as when needed. The writer did assist the staffs in developing customized database formats so that when applications began to be submitted to the programs, a template of each magnet/choice program application would be prepared for use. For all programs, the magnet/choice program application template suggestion was well received and was found useful. The staffs were satisfied with this process.

As the training sessions progressed, the training initiative became very time consuming and labor intensive. It became obvious that many of the programs had had no technology support system for quite some time and many of the users being trained did not possess the requisite skills necessary for an overview training session; in-depth

training was becoming more and more necessary. Therefore, the writer revised her calendar to limit the number of magnet/choice program software training sessions to three to four per week as training sessions were beginning to fill the greater portion of each day. As the high school programs neared deadlines, it became necessary for the writer to then schedule no more than two elementary and middle trainings per week as the demand for support grew. Soon, because the writer had other duties aside from the training, it was necessary to inform the schools and programs by memo that time constraints were arising and that advance planning for training and follow-up sessions was necessary so that all deadlines would be met. The central administration supervisor also had indicated to the programs that their overwhelming needs should be accounted for and that planning should take place so that their needs could be met within allotted time frames. The writer was well supported by the central administration supervisor.

As the third month progressed, telecommunications hardware began to arrive and the writer scheduled installation appointments with program staff. Many installations were accomplished at the previously scheduled training sessions. The modems, however, were not all delivered expeditiously. The telecommunications file server

arrived at the administration building; fortunately, the seller supplied the set-up services and the writer was free to accommodate program locations with their hardware and software needs.

Although the project was very time-consuming, it seemed to be progressing well at the end of the third month, and many positive comments were being related to the central administration supervisor regarding the overall process and the training efforts.

Month Four

During the fourth month, the emphasis was on continued training, continued follow-up support and telecommunications training. The writer's full-time position necessitated a shift in priorities, and the writer became judicious in scheduling training sessions. This did not pose a problem as the high school programs were well on target of the upcoming deadlines, and the middle school and elementary school programs had not yet begun to receive applications. Therefore, the writer was freer to commit to other priorities and to allocate time as possible and necessary with the magnet/choice programs.

Mid-way through the fourth month, two days of telecommunications training were scheduled through the

central administration with the magnet/choice programs staffs and conducted by the Apple distributor. Therefore, the writer did not need to develop telecommunications materials for the training sessions. The writer became seriously ill and missed the training sessions; however, the writer remained a contact for telecommunications troubleshooting and assistance for the magnet/choice program staffs. This became a difficulty as the writer was not trained by the telecommunications system distributor, and consequently the writer felt compelled to learn both the IBM and Apple platforms for telecommunications in order to assist the magnet/choice programs with their questions and concerns.

The remainder of the fourth month consisted of continued software training with the emphasis at the high school level for deadline purposes and at the elementary and middle school levels for initial training. The writer also continued with individualized meetings so as to ensure that database formats were being utilized properly and to the full extent that the school-based program requires. Otherwise, the writer intensely trained on the telecommunications system and visited magnet/choice program to install hardware and software as needed.

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The writer and the central administration supervisor met and discussed the formative evaluation process. It was decided that because only the high school programs were actually using the software for the actual intended purpose it would prove more useful to have a high school level meeting to discuss the pros and cons of the training initiative and new student application process rather than distributing a formative evaluation to all program sites to determine user satisfaction levels. Therefore, a meeting was scheduled for early in the fifth month of implementation. From this meeting the writer would compile concerns, questions and suggestions, and the writer and central administration supervisor would decide on a continuing plan for the remainder of the implementation.

Month Five

The fifth month began with a meeting with the magnet/choice programs high school assistant principals and coordinators. The meeting consisted of discussing satisfaction levels with the training initiative, with the telecommunications system implementation, and with hardware and software received. The meeting also included scheduling for the student application randomization process. Although the schools were quite satisfied with the software training

initiative, some schools indicated that their hardware components did not meet the requirements of the system and they requested random access memory (RAM) upgrades so as to enable the software to run more efficiently. After having worked with each of the systems, the writer did not find RAM upgrades to be necessary for the majority of the systems; however, after privately discussing this with the central administration supervisor, it was agreed that it was more important to assist the programs with their concerns, and as long as finances were available, to provide for the programs in any way they deemed necessary. The central administration supervisor's belief was that when school-based programs were provided for, it was then up to each program to work to make the process successful. The writer agreed. The program administrators and staff were quite satisfied to be receiving computer memory upgrades. Thus the writer began to research the market for random access memory configurations and prices.

The high school magnet/choice program assistant principal and coordinator meeting also consisted of gaining feedback regarding the high schools application deadline and progress in meeting the deadline. All schools were meeting the required deadlines and some questions were posed regarding the randomization process. The central

administration supervisor, with the assistance of the writer, then moved to explain the randomization process and to schedule appointments for randomizing files.

To complete the randomization process, the programs would send complete student application files either by diskette or via telecommunications to the magnet/choice programs office at the central administration building. Once received, the writer, always accompanied by a central administration witness, would utilize an objective randomization process (see Appendix L) and assign random numbers to the applicants in each file and then sort the file by random number from lowest to highest. After assigning random numbers and sorting, the writer would also include serialized numbers (see Appendix L) so as to indicate to the programs what sequence number each applicant held on the master application list. The writer explained that each program would be supplied an electronic copy of the newly revised file and a paper copy of the file; central administration would retain all copies of the files for verification purposes. The writer also explained that if the magnet/choice programs required assistance in subdividing the list into accepted and wait list reports, then the program personnel would need to be prepared with their needed subdivisions specifically delineated so that

the process would progress efficiently.

Because of some apprehension with the new telecommunications system, the central administration supervisor offered the program assistant principals and coordinators the option to send the file via telecommunications or to schedule an appointment to physically deliver the file and to wait for the completed randomization. All programs scheduled appointments for the beginning of month six in the event the telecommunications process failed. Then, the writer offered additional assistance with the letter merge process to make the program administrators aware that if assistance was required it would be supplied.

For the remainder of the month, the writer continued to support programs with their hardware and software needs. Because the month was abbreviated with the winter holidays, the writer chose to visit each high school program to assess progress and to install and assist with hardware upgrades and modifications.

During the holiday period, the writer researched markets and suppliers of memory upgrades. The writer also updated the extensive modifications to the magnet/choice program database to include all hardware and software purchases, the intended purchases, training accomplishments

and training needs during the sixth and seventh months. The writer also continued to learn the telecommunications system software so as to encourage its use and to assist the programs with utilization.

Month Six

When the writer returned from the holiday break, it was necessary to begin the high school student randomization process and to order the random access memory upgrades for all of the magnet/choice programs. The writer submitted bid sheets to the central administration supervisor for approval and the memory upgrades were ordered by the supervisor's secretary to be delivered to the coordinator for installation. The writer developed a schedule for memory upgrade installation; however, at the writer's urging while conferring with the central administration supervisor, memory upgrades were sent to the technology magnet/choice programs for in-house installation. This saved the writer from traveling to 17 locations in a limited time period. The remaining memory upgrades would be installed by the writer while visiting for training or other purposes.

On the first day after the break, two high school magnet/choice administrators were scheduled for 2-hour appointments each morning for 4 of 5 days throughout the

first 2 weeks of the sixth month. Because the writer was working with both IBM and Macintosh computer systems, it was necessary to plan ahead to compensate for cross platform use. First, it was communicated to IBM users that they must provide the files on high-density diskettes as the computer system being used for randomization would be a Macintosh system and that system would read IBM or compatible files, but only on high-density diskettes. If double-density diskettes were utilized, the Macintosh systems would not read the diskettes, and the writer would not be able to randomize the files while the program administrators waited.

The process began with the first magnet program hand-delivering the Macintosh formatted high density diskette and the student randomization process proceeded rather smoothly, taking approximately 1 hour. The high school magnet/choice programs needed fairly simple reports as they were only accepting grade 9 applicants. Therefore, the writer needed only to generate a master random number and master serial number for each applicant in the file. Where programs had more than one program in which to be accepted, the writer subdivided the file into reports which included adding a new field to indicate the program for which the applicant had applied, then assigning each applicant in each program a serialization within each subgroup. The writer generated

file reports and provided central administration with copies of the randomized file and paper copies of the reports.

When the second program arrived, the IBM formatted diskettes brought to the randomization process were double-density diskettes. The writer searched central administration for a computer that would read the file, but because of the writer's other job obligations, not enough time was available for the writer to find an IBM or IBM-compatible computer that would read a double-density diskette so that the file could be transferred to a high-density diskette. Therefore, the writer offered to transfer the file that evening as the writer owned an IBM-compatible computer that would read the double-density diskette.

Upon trying to transfer the file while at home, the writer found that the diskettes were not being read by the IBM-compatible computer as the diskettes were damaged. When the writer asked the program administrators about the problem the following day, the writer was told that the diskettes had been left on the dashboard of a car overnight in weather reaching into the 30-degree range. This caused the files to be irreparably damaged and the magnet/choice program would be required to resubmit copies of the files on high-density diskettes. In an effort to expedite the process, the writer arranged to visit the school site and to

copy the required files onto high-density diskettes, then to bring the files to the administration building, to randomize the files, and to return the diskettes to the school site. Although this process was time consuming, the writer felt that the correct diskettes would be used and time would not be taken from the other programs or from the writer's other responsibilities if the writer took control of when the process would take place.

The second program's files were randomized the following morning and the diskettes and reports were returned the following afternoon. In the meantime, the writer located an IBM computer that would read double-density diskettes in the event that the initial directive had again been ignored by the program administrators using IBM computers. The next IBM platform magnet program also brought the file to central administration on double-density diskettes; however, the writer was able to use the newly located IBM computer to copy the file from the double-density diskette to a new high-density diskette and then to proceed with the randomization on the Macintosh computer. The software easily read the IBM file and converted it into Macintosh format, and once the randomization process was completed, the file was easily converted back to IBM format. All reports and copies were delivered to the central

administration supervisor's office. This process proceeded with 6 of the 8 high school programs over a 2-week period.

Two of the high school programs electronically transferred application files supplying any important instructions through e-mail; the files were in both IBM and Macintosh format, and they were randomized efficiently and effectively and electronically transferred back to the programs. Those using the electronic process were quite content with the process. The other high school programs were content with the process; however, they felt that time was lost in their having to physically deliver the files to the central administration magnet/choice office.

Once the high school randomization process was completed, the central administration supervisor and the writer scheduled a meeting with the elementary and middle school magnet/choice program principals, assistant principals and coordinators. This meeting was scheduled to discuss satisfaction levels with the initial training initiative, with the telecommunications system implementation, and with hardware and software received. The meeting also included scheduling for the student application randomization process. The elementary and middle school program personnel indicated that since the initial training session was prior to receiving applications

that much of the information was not remembered by the staff designated to input student data. However, it was reiterated that intensive follow-up sessions were planned by the writer so that support and training would be available when student applications were received by the elementary and middle school programs.

The elementary and middle school administrators were pleased that they would be receiving random access memory upgrades for their computer systems; however, they required assistance in installing the upgrades, and they indicated that much support was needed in utilizing the telecommunications system. Of the 3 middle and 7 elementary school programs, only 3 programs took the initiative to connect to the telecommunications server at the central administration. Therefore, the writer indicated that while at each site for additional training, an attempt would be made to connect each program to the telecommunications system. Then, the new process was explained and discussed and appointments were scheduled for the randomization process. No elementary or middle school programs felt comfortable with scheduling electronic file transfer, and therefore, all elementary and middle school program personnel scheduled to physically deliver the files via diskette to the central administration building.

Meanwhile, the writer provided letter merge assistance to the high school programs. However, because the program administrators did not have essential information at the time of randomization, it was necessary for the writer to assist with subdividing the student application files into appropriate programs applied for and then into reports including those applicants accepted into the programs, those applicants accepted but placed on a waiting list, and those applicants not accepted into the indicated program. Because 2 of the program secretaries had not worked with such concepts as applied to computer queries, the writer found it necessary to make numerous visits to these sites and to assist with student status and letter merge. By the second week of the sixth month, high school program letters were correctly merged and mailed to student applicants. The high school official process was then completed.

The writer then began intensive training with the middle and elementary school magnet/choice programs as student applications were being received. With the elementary and middle school programs, the writer found that up to 6-hour sessions with additional follow-up visits were required to complete the design and input process. The middle and elementary school programs accepted applications during a 2-week period and then had a 2-week period in which

to complete all data input before the randomization process. While providing intensive training to the middle and elementary programs, the writer continued with on-going assistance with system upgrades for all programs, and with the high school programs, assistance was given when administrators requested reports requiring database manipulations beyond the skill level of the program staff. Also, while maintaining communication with the magnet/choice program sites, the writer provided continued telecommunications system assistance.

Throughout all processes, the writer maintained weekly communication with the central administration supervisor. This assisted the writer when time conflicts occurred, and by having strong communication and a strong relationship with the central administration supervisor, the writer was able to utilize the supervisor's secretary for time-consuming tasks that would otherwise take the writer from full-time job duties beyond the scope of the students application, selection and notification process.

Month Seven

The seventh month began with appointments to randomize the elementary and middle school student application files. One middle school elected to attempt an electronic file

transfer. The file was transferred successfully with an e-mail message indicating necessary subdividing by grade level and by race (in accordance with the federal desegregation law). The file was successfully randomized, subdivided and returned to the middle school for in-house letter merge processing. The elementary and middle school processes proved to be much more involved and complicated than the high school randomization processes.

Because of the seriousness of maintaining racial balance within the schools, and because student waiting lists are carried over from year to year, reports were generated based on many factors per grade level. The middle schools were accomplished in a matter of 2-hours per program as the files were subdivided into grade 6, grade 7, and grade 8, and were then subdivided by race. The race field indicated that the student was either Black (B) or Non-Black (NB). Therefore, for the middle schools, the writer subdivided each master file into 6 reports.

For the elementary school magnet/choice programs, the process became very complicated and each randomization took up to 4 hours to complete. First the writer randomized the entire file with all grade levels included so as to develop a master randomization list. Then each student was given a master serialization number according to the sequence of the

random number from lowest to highest. Then, so as to develop reports by race and by grade level, the writer developed queries with the required criteria for each race at each grade level. From each of those lists, the master serial numbers were sorted from lowest to highest and a specified number of students were accepted into the magnet/choice program. In order to mark these students as accepted a new field, student status, was added to the database and "A" was input to indicate acceptance. The remaining students from the grade level list were given a notation in the student status field that indicated wait list status as no students in the elementary programs were rejected. Then, the writer modified each query to include "student status equals W". After that process the writer then queried each wait list by grade level, sorted the individual lists by serial number from lowest to highest, and then assigned another field with serial numbers to each list by grade level and by race. The writer also developed a new query to include all students accepted for each grade level into the magnet/choice program.

Also, to make the process more complicated, for some elementary magnet/choice programs it was necessary to develop a priority waiting list for siblings of students already accepted into the magnet/choice program and for

children of teachers working for the magnet/choice program. This consisted of noting in the student status field whether the applicant was a sibling of a student already in the magnet/choice program or if the applicant was a teacher's child. Then a new query was developed to single out these students by race and grade level and by inputting a "PW" into the student status field, and finally these students were assigned new serial numbers according to the master random number as listed from lowest to highest.

In many cases the end product for each elementary school resulted in up to 6 reports being generated per grade level for the K-5 applicants (i.e., Kindergarten Black Accepted, Kindergarten Non-Black Accepted; Kindergarten Black Wait, Kindergarten Non-Black Wait; Kindergarten Black Priority Wait, Kindergarten Non-Black Priority Wait; Grade 1 Black Accepted, etc.). With the writer developing a report for each segment of the applicant population and with having to carefully check the total number of applicants against the number of students within each report, the process became very laborious and time consuming. However, the program administrators were quite pleased with the information they had available to them when leaving the randomization process.

After spending approximately 2-1/2 weeks working with the elementary and middle school randomization process, the writer began to visit the elementary and middle school programs to assist with the letter merge process. The programs were instructed to have their letters prepared for merging so that, where possible, the writer could actually assist in an initial merge process to make the process more relevant and meaningful to the trainees. By the conclusion of the seventh month, the writer had assisted all elementary and middle school programs with the notification process. The official student application, selection and notification process was completed by the end of the seventh month; however, the writer continued to provide on-going assistance with system upgrades, with database manipulations, and with the telecommunications system. As clerks and secretaries were required to develop reports requiring skilled database manipulations for their administrators, the writer's assistance was still in demand.

Month Eight

By the beginning of the eighth month, the writer was able to focus on regular full-time job duties and to bring the project implementation to a close. The writer concluded installing system upgrades, but made an effort to contact

each program to ensure that all magnet/choice programs were utilizing the telecommunications system and to encourage each program to use the system regularly as a means of communication and as a file transfer system. Where programs were not utilizing the telecommunications system, the writer visited the site to assist with hardware and software concerns in hopes that the programs would begin telecommunications use.

During the eighth month, the writer developed a Student Selection Processes Post Survey (see Appendix I), had it approved by the central administration supervisor, and sent it with the Database Satisfaction Survey (see Appendix B) and the Timeline Check Sheet (see Appendix C) to each magnet/choice program administrator and to each individual trained in each program. Then the writer began to compile data to determine overall opinions about the new student application, selection and notification system.

CHAPTER V

RESULTS, DISCUSSION AND RECOMMENDATIONS

Results

The communication and paperwork structure between the magnet/choice program district administration and the district-wide magnet/choice programs was not efficient, and as the number of programs increased, application processes yielded increasing amounts of data collection and input errors that created problems aside from the already cumbersome and paper-laden manual process. An attempt at instituting a technology-based student application, selection and notification system failed, only to create additional manual work and frustration for school-based and central administration personnel. Therefore, the writer designed and implemented a technology-based student application, selection, and notification system, training program, and electronic information transfer system to decrease the amount of data collection and the number of collation errors and to create a process that was less cumbersome, time-consuming and paper-laden. The electronic

information transfer system was developed as an effective means of electronic data transfer and communication between school-based magnet/choice programs and central administration so as to reduce the paper-laden process and to realize more immediate and convenient results throughout the student selection randomization process.

The writer projected that, at the conclusion of the implementation period, 8 specific outcomes would be realized.

The first expected outcome was that the newly implemented software would be fully utilized by at least 15 of the 17 magnet/choice programs. This outcome was achieved. The central administration supervisor strongly encouraged each program to utilize the new software for its ease of use and for compatibility with all computer platforms. The supervisor also purchased the software for each of the programs which resulted in all 17 programs utilizing the newly implemented software for the new student application, selection, and notification process.

The second expected outcome was that of the 17 program administrators and additional staff, all participants would indicate that the customized database design or the generic database design met the specific program's needs. This outcome was achieved as all programs developed

individualized database fields which met each programs' needs. All 17 of the programs indicated on the Needs Assessment (see Appendix J) that they desired a customized database format which was developed with the program administrators and staff at the individual database training sessions. Of the 20 respondents to the Database Format Satisfaction Survey (see Appendix B) 13 indicated that they were very satisfied with the customized format, 5 indicated that they were satisfied with the customized format, and 2 indicated that they were somewhat satisfied with the customized format. However, the 2 somewhat satisfied indications and 3 of the 5 satisfied respondents also commented that because customization was a new process, much refining needed to take place and that that would be accomplished school-based as the software was utilized for other purposes and as the capabilities were more readily realized and mastered by the users.

The third expected outcome was that of the 17 program administrators and additional staff, all participants would complete data input according to central administration timelines. This outcome was achieved as all programs were scheduled for student applicant randomization at the central administration and all participants were present and prepared at the time of the appointments.

The fourth expected outcome was that at least 15 of the 17 programs would supply central administration with student information for student randomization, acceptance, wait, and rejection lists according to central administration scheduled timelines. This outcome was achieved as all programs were scheduled for student applicant randomization at the central administration and all participants were present and prepared at the time of the appointments. Four of the 17 programs were ahead of schedule.

The fifth expected outcome was that merged data on student notification letters, including school name, address, phone number, and student status would be correct 100% of the time. This outcome was achieved. Letters were developed at each school-based magnet/choice program office rather than utilizing a generic letter for all programs. The writer assisted with many of the letter merges to ensure that all processes were completed accurately as well as expeditiously.

The sixth expected outcome indicated that no incidences of conflict would occur between the central administration and the writer/trainer as all processes would be explained, expedited and completed. This outcome was achieved. The writer and the central administration supervisor maintained a very positive and productive relationship throughout the

entire process and all occurrences and processes were discussed openly and in a timely manner. The central administration supervisor often expressed satisfaction with all processes and procedures.

The seventh outcome projected that the notification and selection processes would be completed within the regular workday 100% of the time. The outcome was not achieved. Of the 20 respondents to the Time Line Check Sheet (see Appendix C) 15 respondents indicated that the data input was not completed within the regular workday. Fourteen of the 20 respondents indicated that within the data input period an average of 22 hours was spent beyond the regular workday. Fourteen of the 20 respondents also indicated that the data input was not balanced with other duties, that the data input was an additional job requirement, and that the data input placed stress on regular working conditions. However, 18 of the 20 respondents indicated that the new database system made the student application, selection, and notification process more manageable than it was previously. Although the outcome was not achieved, it is evident that non-achievement was the product of utilizing a new software program and implementing new processes.

The eighth outcome was that final information transfers would be completed electronically 100% of the time. This

outcome was not achieved. Because the telecommunications system was new to all users and because many of the programs did not yet have the hardware in place for electronic transfers, the central administration supervisor offered all programs the option of hand delivering files via diskette to the central administration for randomization. Four programs of the 17 programs successfully transferred the files electronically.

Unexpected Outcomes

Aside from the expected outcomes for the project implementation, many unexpected outcomes occurred. First, the writer learned quickly that when working with 17 programs and more than 34 individuals at various locations throughout the district and while holding a full-time position, it is imperative to be flexible in scheduling training sessions and to be patient with the trainees and their requests. The writer did not fully expect the extent to which the magnet/choice programs technology needs had not been met previously through the school system, nor did the writer expect the school-based administrators' and staffs' excitement and verve associated with having a knowledgeable

and willing technology expert to call upon when desired and needed. The magnet/choice program office at the central administration had met the programs' technology needs previously; however, the department did not have a technology specialist available for magnet/choice programs only and the school-based sites, like all other schools within the district, shared the instructional technology department at the central administration which consisted of 3 instructional technology curriculum personnel and 3 technology specialists to be shared by a very large and growing district.

The writer also learned a great deal about scheduling time frames that would accommodate learners while not overwhelming them. At first the writer believed that the training sessions could be accomplished within a 2 to 2-1/2 hour training period; however, by the completion of the third training session, the writer found that the training sessions needed more time allotment and ultimately the writer found that sessions could take up to 6 hours with additional visits necessary. The writer did not expect the school staffs' lack of requisite skills which are necessary for basic database manipulations and for developing queries. The writer expected a basic database manipulation knowledge to be present, but found that many individuals had not been

previously challenged to develop this mode of thinking for workplace activities. Nonetheless, the staffs worked hard to accomplish the goals of the new process and to become independent learners and thinkers with the software and with database manipulations, and, for the most part, all school-based staff succeeded in understanding and in utilizing the software as relevant to the schools' needs.

Aside from the time-consuming process of training, the writer also found that the project implementation required the writer to take on many additional responsibilities to outfit the school-based sites with adequate and necessary additional hardware as well as with skills. The writer found that in order to make the project a success, total involvement had to occur ranging from installing modems, printers and memory upgrades to setting up complete computer systems and working with existing equipment and programs. Also, the writer found that the school staffs at times were more concerned with working with other program and technology concerns than with the actual project implementation. Although these other processes were not the matter at hand, the writer assisted so as to gain greater cooperation with the overall and forthcoming processes.

Aside from the training sessions, the writer found that another time-consuming aspect of the project implementation

was in maintaining prompt responses to phone calls for assistance from magnet/choice programs. The writer often became inundated with providing phone support to the school sites. At times the writer spent up to 2 hours troubleshooting and assisting with one call. Also, the school staffs often recommended the writer to other individuals with technology problems within the schools, and the writer found that many calls received were unrelated to the magnet/choice program project. However, the writer did assist the other callers so as to ensure cooperation and satisfaction overall.

The problem that the writer found with providing so much intense assistance to some magnet/choice programs was that it began to appear that some of the staff called the writer when the process could have easily been learned though the training manual or the software manual provided at the initial training. Some individuals were more apt to have the writer revisit or phone and work through the process in a step-by-step process rather than to attempt to complete the process independently. Nonetheless, the writer assisted with every phone call and concern in hopes that the users would soon become independent users. Also, the writer found that with many users, a reassuring phone call assisted them in knowing that the processes they had chosen were

viable and would lead to favorable outcomes within the database.

The skill discrepancy in school-based staff, according to the educational level of the magnet/choice program, was also evident. The writer never expected that the school level at which the trainees worked would have any relationship to the staff skill level. However, the writer found that at the high school level the staffs proved much more independent than at any other level. Two of the eight high school program secretaries were initially dependent, but, after having support and practice, they became very independent in their software use. At the middle school level, 1 of the 3 magnet/choice program trainees proved very dependent upon the writer; however, the supervisor of that magnet/choice program placed many great and varied demands upon the clerk, and the clerk had had no prior database manipulation skills.

The elementary level magnet/choice program trainees proved to need the most assistance and support in working with the database and manipulations. Of the 7 elementary level magnet/choice programs, the writer spent considerable time assisting and supporting 6 of the program staffs by visit and phone. This was unexpected as the writer did not expect to find less practical training at any school level;

however, it became apparent that the elementary supporting staffs were not offered technology training sessions, on-site support as were the other school levels, or available time for either.

Aside from skill discrepancies, the writer also found that at many of the magnet/choice programs the specific guidelines for specific database field input were not heeded. The writer and the central administration supervisor explained to all participants that it was necessary for certain data fields to contain data in a specific format so that central administration could query the information across the database files without having to modify the query for each file. The administrators and staffs were also requested through memorandum to complete certain procedures in specific formats; however, many of the magnet/choice programs did not heed the memorandums nor did some follow the specific formats requested for data input. By not heeding the memorandums or the specific data input requests, much time was often lost in re-entering information, in correcting format variances, and in revising queries and reports.

Another area that was unexpected to the writer was to find that some administrators whose magnet/choice programs were technologically well-equipped used the new student

application, selection and notification process as a means by which to gain more technology components for their magnet/choice programs. One school in particular complained about the processes forthcoming and stated that the existing school-based technology would not be adequate for the process; the irony of the complaint lies in that the program is a technology center and has access to some of the most progressive technologies within the district and also in that the specific computer for which the additional hardware was requested was not the computer on which the process was completed.

Also, the writer found that at one magnet/choice program the administrators appeared competitive with the central administration decision to implement a new system. The program administrators at the site were competitive with central administration's efforts in providing an effective, simplified process. The administrators apepared to want the process to fail so that their assumptions would prove true rather than in recognizing the time, effort, and finances involved in providing a more effective, efficient and user-friendly system for the programs. The writer found the display quite unexpected as the process included completely outfitting the magnet/choice programs with hardware and software and with meeting training needs which only

benefitted each and every program in the project implementation.

On a more positive note, the writer did not expect the positive final products realized after the long and laborious training and support initiative. The writer found that the development of each database far exceeded the scope of the Database Utilization Survey (see Appendix A) expectations, and, therefore, the writer did not utilize that tool. The creativity and sophistication with which each program ultimately developed and utilized various database manipulations caused the writer to feel that questioning these processes with an evaluation tool would prove counterproductive.

For the most part, the practicum implementation proved that the unexpected led to positive and productive changes rather than negative setbacks. The writer found there were fewer unexpected occurrences than may have been possible with such an involved and intense practicum implementation.

Discussion

The practicum implementation was subject to many modifications as noted in Chapter IV. It will be subject to

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many more evaluations, modifications, and refinements for continued implementation. However, the writer believes that the new implementation of the student application, selection, and notification system made the system a stronger, more relevant and more applicable system. The writer finds that although not every expected outcome was achieved, the practicum implementation was very successful.

The writer perceives that the decision between the central administration supervisor and the writer to require all magnet/choice programs to utilize the same software package for the new implementation was a wise decision as by seeking consistency throughout all programs, there were no incidences of discontent, disillusionment, or indecision. Since each magnet/choice program was learning a new software package with the same outcome in mind there were no discrepancies in process or software compatibility. As was noted by Richie (1994), user satisfaction was sustained and achieved as an internal commitment was sought after with user support and service as the end goal.

By utilizing same processes and tools the writer was better able to compare and analyze results at the implementation conclusion and to better understand the discrepancy that occurred in user skill levels at specific school levels. Without having a well-organized plan based

in support services and on-going communications and training (Farley, 1992) the writer would not have realized that skill level discrepancies do exist from school level to school level. This assisted the writer in understanding not only the time frames necessary for training at various school levels but also in understanding where specific technology needs are throughout the district.

Donaldson (1993) related that educational leaders must provide staff with quality training and skill-building opportunities so as to become more efficient and productive and to encourage smarter working habits without depleting human and physical resources. The writer understood this as a concept; however, the writer did not fully realize or recognize the dire need for individualized attention and on-going quality services within the elementary programs in particular. If administrators, clerks, and secretaries are not offered and provided technology training initiatives that relate directly and relevantly to their positions, then it is impossible to expect that technology will be perceived as a means by which to accomplish tasks and a vehicle by which to benefit the school or program as a whole.

The writer's plan was to develop a training program that sought input from users and which focused on continuous program, system, and design improvements that were

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inherently focused on user needs (Richie, 1993). The writer understood the technology requirements for such an extensive project, but it was necessary for the writer to take that understanding to the magnet/choice programs and to enable them to determine database formats that satisfied their programs' needs. Also, as the implementation progressed, the writer found that it was necessary to apply leadership in determining the manner in which the technology was implemented so as to promote the overall success of the training initiative (Kearsely & Lynch, 1992). This included tending to all of the hardware, software, and training needs of the individual magnet/choice programs and this also developed into many additional duties for the writer; however, the writer realized that after long hours and a great deal of labor, the programs developed database files that far exceeded initial expectations.

By developing a training program that met user needs, the writer also found that a great deal of flexibility and a great time investment were necessary so as to fully and thoroughly provide training for the magnet/choice program administrators and staffs. The writer had initially begun shorter training sessions with the high school programs; however with the time spent in follow-up activities to compensate for activities overviewed, the writer realized

that it would prove much more productive for all to schedule longer training sessions and then to follow-up with extensive support. With the shorter training sessions, the writer began to discern that the trainees did not view the project as one leading to a successful or better circumstance, and based upon Raebeck's (1994) assertions, then that is asking too much. The writer was quickly reminded of Raebeck's words and Raebeck's (1994) further statement that concern with thoughtfulness, care and quality often promote performance and vision. Therefore, the writer began to take great care in tending to each individual's and each magnet/choice program's needs. By offering the trainees a positive and confident attitude, the trainees were more willing to spend the time required to learn the software application and to offer the commitment to follow through with the new project to reach successful ends.

In relation to the manner in which the magnet/choice programs met the required central administration data input and student randomization, acceptance, wait and rejection list scheduled timelines, the writer found that by providing on-going phone and visitation support and follow-up that the trainees were better able to meet the required deadlines and with more skill than was expected. The writer did spend an inordinate amount of time providing phone and on-site

support to the programs; however, because the project became very successful and, moreover, because the staffs visibly showed enthusiasm in having learned more complicated processes and database manipulations, the end result was well worth the time spent. The writer followed Reneke's (1994) indication that in relating a new approach to planning, and to meet office needs, a complete reengineering must be directly related to what the organization is trying to accomplish rather that focusing upon speeding data collection. With this in mind, the writer learned to focus on the outcome and on quality and to ignore inconveniences and time constraints in favor of the end result.

An interesting aspect of the process regarded meeting central administration timelines. During the school level meetings at central administration the subject of hiring additional staff for the process and/or obtaining additional paid hours for existing staff emerged frequently. When the results from the Time Line Check Sheet (see Appendix C) were compiled it was found that 20 of 20 magnet/choice programs completed the data input on schedule, but 14 of the 20 indicated that the process was not balanced with other duties and placed stress on regular working conditions. However, 18 of the 20 indicated that the new software and process made the task more manageable than previously. The

writer discerns that these results may indicate a relationship to the programs seeking additional clerical assistance or hours or it may indicate that the programs find that with additional use and time, the software program and processes will be integrated into regular work duties and procedures. An interesting aspect of this discrepancy is that the hiring of additional hours or personnel does not rest with the central administration supervisor, the decision and funding lies with the area operations team. In future process implementations, once staff have learned to work smarter rather than harder (Donaldson, 1993) the Time Line Check Sheet results may give the area operations team insight into future program and school-wide clerical needs.

Reneke (1994) suggested that by putting computers on the most productive workers' desks, others would then take notice of the improved productivity that may be realized with technology. The writer found this to hold truth as others outside of the project implementation began to call upon the writer with technology hardware and software questions. Although the writer was often overwhelmed with the additional work associated with assisting others, the writer felt a great deal of satisfaction with the project and also found a new sense of technology leadership. The writer found this as an additional satisfying result to the

project.

Other areas for discussion were apparent within the technology training initiative. The writer found that as time progressed the training initiative became an exceptional training and management program as it considered user skills and organizational priorities and also built upon that foundation so as to develop a program that assisted with the overall goals of the offices and magnet/choice programs. The individualized user support generated increased productivity and enhanced technology-based knowledge that assisted with other office tasks (Horn, 1986). By recognizing Kearsely & Lynch's (1992) assertion that leaders must influence school cultures and must be able to create new visions of improvement that other organizational members can believe in and act upon, the writer was able to build a greater base of open communication and learning and thereby broadened the foundation of the training initiative to reach beyond the single project and into regular workday duties.

However, regardless of the exceptionality of a project, skeptics will always be present. The writer found it disconcerting that amid all of the progressive changes occurring, one program chose to compete with central administration's decision to implement the new process, and

others requested obviously unnecessary yet expensive equipment to complete the project implementation. Although the skeptical administrators accepted all of the hardware and software offered to their programs, it appeared that there was a desire for the project to fail. After conferring with the central administration supervisor as to these attitudes, it was decided to move forward with a positive end result in mind and to supply the programs with exceptional training efforts and with the requested equipment. The mindset was that when budgeting allows, it is more productive to supply programs with their requests (within reason) than to deny requests. Then as the implementation progresses, a profound sense of obligation to the project is to be expected rather than reason for objection. The writer was satisfied with this explanation and proceeded with a positive and energetic attitude.

Data compiled from the post survey indicated that the magnet/choice program staffs and administrators were quite satisfied with the Microsoft Works Training initiative and the with the Microsoft Works trainer, although not quite satisfied with the telecommunications system training and follow-up. A point of interest to the writer was the Microsoft Works Trainer section of the post survey which revealed two areas where one program administrator was

uncertain as to the whether the trainer maintained communication with trainees when necessary or whether the trainer maintained a follow-up schedule when necessary. The writer found that in the instance of this respondent, the writer was unable to contact the administrator after repeated attempts so as to communicate progress of the project or to schedule a follow-up visit. The writer left numerous messages and did not receive responses and therefore, did not continue to pursue the administrator, assuming that if the need arose, the administrator would contact the writer.

When the administrator could not be reached for a particular situation, the writer visited the site and corrected the problems that were indicated by voice mail. The writer found it interesting that the administrator was not accessible at a planned site visit; yet the post survey indicated uncertainty about communication when it was provided and about follow-up scheduling when it was not requested. Again, the writer finds that other's expectations are often unrealistic and that because a new system is implemented there will be resistance to the implementation efforts.

After continuing the project implementation with these programs, the writer began to attribute certain attitudes to

both skepticism and to resistance to change. Throughout the project implementation, the writer found that the greatest barrier to the training initiative was that many individuals were being required to change from old and comfortable processes and to accept new, challenging processes within the workplace. Change is difficult to internalize; however, by promoting success, by accepting input at all levels throughout the concept and design phase and through more democratic teaching and learning processes (Rowe, 1994), the writer was able to bring about new perceptions and awareness, and ultimately positive change.

The telecommunications system that was purchased and implemented for the magnet/choice programs became a pilot system for the district. The telecommunications system proved to be and will grow to become a critical element in increasing personal and organizational productivity (Vasu, 1990) and a worthwhile and productive means of communication and file transfer between magnet/choice programs and central administration. Because of the system successes similar systems will be implemented in other central administration departments for use district-wide. The magnet/choice programs telecommunications system currently is equipped with one phone line and one modem; however, the system has the capability of expanding to support nine phone lines and

nine modems so that asynchronous and synchronous communications may occur at many levels.

The telecommunications system for this project, however, was not fully utilized, and the writer attributes this to the rapidity with which the system was put into service and with the short time period in which the magnet/choice program staffs and administrators were given to be trained and to be utilizing the system. Many of the magnet/choice programs were not equipped with the hardware or with setup assistance to be able to connect to the server immediately, and, therefore, in some cases utilization was delayed. However, based upon West's (1994) assertion that telecommunications is an essential component in providing for administrative functions, the writer recognized a need for assistance and did assist with hardware setup, software installation and connectivity requirements for the programs when possible so as to expedite users' connectivity.

The training session for the electronic information system was held for two days, training one group per day. The distributor conducted the training sessions but did not offer or provide on-going support for the magnet/choice programs unless specifically called upon for support. This may have also led to the lack of enthusiasm for the system by the trainees. As was noted in the initial technology

based implementation that failed, one major factor leading to the failure was that only one training session was held with no follow-up training or support offered. Therefore, the writer accepted the task and worked diligently to assist the programs with their telecommunications concerns.

With an installation and training situation as this, it would have been wise to begin the telecommunications installation process long before the training took place. The writer now sees that the telecommunications implementation would have been effective if the magnet/choice programs had been equipped with modems, phone lines, and software before the training initiative so that when the training occurred, the administrators and their staffs would have had the opportunity to return to the magnet/choice program office and practice the newly learned skills. Kofsky (1990) related that when administrators are involved in technology processes, office procedures can be greatly improved. The administrators were involved in the training, but without the equipment ready to be used at the magnet/choice program office, no further involvement occurred until the writer later assisted with implementation. In some cases, the hardware, software and phone lines were not in place until up to 3 months after the training session, thereby delaying use and interest in the

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telecommunications system.

Another factor relating to delayed use of the telecommunications system was that users feared the concept of telecommunications as they did not fully understand the telecommunications process nor did they understand the ramifications of technology in the workplace. The users often expressed great apprehension about transferring documents from their computer systems to central administration via telecommunications as many thought that the documents would not reach central administration and would be permanently lost. Much of this had lain in the individual's inability to grasp the concept of file transfer through phone lines. Carmona (1995) indicated that communication technologies not only rapidly enhance but also change our ability to understand and manage our work environment and provide great potential within the educational setting. If this, as well as the fundamental concepts of telecommunications, had been explained prior to the telecommunications training, then, perhaps, the users would have more readily used the telecommunications system when it was properly setup in the magnet/choice offices.

The practicum was highly effective and highly successful overall as indicated by the outcomes. The magnet/choice program staffs and administrators learned

about technology utilization in the student application, selection and notification process, but moreso about technology utilization in the workplace as a means by which to work smarter and to produce more effectively and efficiently. The trainees indicated that they felt more confident and more prepared to utilize technologies in future job duties and in general office procedures. The training initiative's intent was to prepare the staffs and administrators for future magnet/choice program student application, selection and notification procedures by enabling them to independently work with the new administrative database and to independently troubleshoot when complications arise. The opportunity to experience this training initiative enabled the trainees to receive a broader view of their own capabilities and skills and to understand the broader and greater power and possibilities technology offers to their operations.

The student application, selection, and notification training and the telecommunications implementation required extensive planning, preparation and implementation time on behalf of the writer; however, the benefits of preparing the magnet/choice program staffs and administrators to become more independent, effective and proficient in their office duties far outweigh the preparation and implementation time.

As Donaldson related (1993), by assisting individuals to become independent technology users, the users become more skilled and prepared for future demands and challenges that they will encounter as they attempt to balance their office duties with the human and physical resources which may be spent benefitting children. Technologically prepared administrators and staffs enter into each workday prepared to navigate through the daily plethora of paper laden office duties, and, in effect, better prepared to meet the greater challenges of benefitting their students.

Recommendations

In concluding this project implementation, the writer has basic recommendations that will assist in improving future training projects where technology is integrated into office procedures. The recommendations are as follows:

1. Always plan activities that are relevant to the outcome.
2. Be clear as to expectations and the final product.
3. Do not focus upon technology as the content; technology in and of itself should be viewed

as a tool by which the purpose is achieved.

4. When hardware repairs are requested, do not explain processes and procedures unless requested as many individuals are confused by technology.
5. Allocate a full-time or part-time position for complicated and involved projects such as the one described in this report.
6. If a full-time or part-time position is not possible, divide the duties between a technology hardware and installation specialist and a software training specialist.
7. Always ensure that the trainer is patient, amiable and flexible.
8. The trainer must utilize a familiar daily calendar planner rather than developing a new log as the process must be integrated with other duties so that adequate time is available for follow-up communication and visits.
9. Allow the trainer to have a great deal of flexibility in scheduling as the focus is on technological proficiency while mastering on-

going relevant processes rather than focusing upon a limited timeline for a cursory introduction to complicated processes.

10. Ensure that the trainer is well-organized and able to balance the training initiative with other duties.
11. Expect trainees to become frustrated, but empower them by including them in the design, implementation and decision-making processes.
12. When trainee requests seem overwhelming to the trainer, the trainer should be prepared to extend all courtesies and to assist; this is beneficial when the trainer must later make requests of the trainees.
13. Make the software application program and training as simplistic as possible because, again, the process mastery is the ultimate concern and goal.
14. Provide elementary-level administrators and staffs with the same technology training time and opportunities as are available to middle and high school level personnel.
15. Develop materials to supplement professional manuals.

16. Do not hesitate to abandon measurement tools that may disrupt the flow of the training or process. If a measurement tool may place an additional burden on the trainees, integrate it with a final measurement tool.
17. When implementing a telecommunications system, ensure that all hardware and software components are purchased, delivered, and connected in each program before the training session so that users may return to the office and implement their newly learned skills and knowledge.
18. Always maintain clear and open lines of communication with all individuals involved in the implementation, and processes will flow smoothly.
19. To avoid contradictory post survey results, clarify to participants that information gathered on a post survey is to measure the project implementation and that post survey results will in no way serve to expand clerical staffs.
20. So as to avoid timely and additional activities to complete a task, expect that memorandums with procedural directives may not be read by

participants.

The writer plans to continue assisting with this project in subsequent years. However, the writer will modify the project in consideration of the implementation findings and will seek to make ongoing quality improvements as future implementations reveal the need. The writer will re-assess the evaluation tools and surveys and modify them as is needed. The writer will also seek to develop more progressive, efficient, and effective means of implementing the student application, selection and notification system.

Dissemination

The writer intends to disseminate the practicum results throughout the school district in hopes that others will take the initiative to lessen paper laden and cumbersome administrative processes. The writer has shared the development and implementation and will share the results with the magnet/choice programs' central administration supervisor, with her supervisor, and with others within the central administration office. The writer will assist in training those offices interested in developing an administrative database or an effective telecommunications

system as time progresses, and the writer will continue to be accessible to magnet/choice program administrators and staffs. The writer also intends to share the results of the project with various professionals and parents who may be interested in the entire student application, selection, and notification system.

The writer has and will continue to share the processes and procedures of this implementation with other magnet/choice program administrators, supervisors, and staffs throughout the state and throughout the country so as to assist them in relieving their cumbersome and paper laden processes. An avenue to reach these magnet/choice programs is through the Magnet/Choice Schools of America Conference which is held annually. The writer will also continue to network with educators in other states with the hope that by offering sound technology training and on-going support and communication, administrative functions will be completed with minimal effort and greater efficiency so that efforts and energies may be spent addressing students' needs.

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APPENDIX A

DATABASE UTILIZATION CHECKLIST

Database Utilization Checklist

School Name:
Contact Person:

Database Information:

Student, Legal Name:	☐	Age:	☐	Birth date:	☐
Address/City,ST,Zip:	☐	Sex:	☐	Race:	☐
Home Phone:	☐	SSN:	☐	Grade:	☐
Parent/Guardian Name:	☐	P/G Business:			☐
P/G Home Address:	☐	Business Address:			☐
P/G Home Phone:	☐	P/G Business Phone:			☐

Additional Fields: ☐
☐
☐

Database Manipulations:

Query #1 ☐
Query #2 ☐
Query #3 ☐
Query #4 ☐
Query #5 ☐
Query #6 ☐
Query #7 ☐
Query #8 ☐

APPENDIX B

DATABASE SATISFACTION SURVEY

Database Format

Satisfaction Survey

School Name:

Contact Person:

Database Format: Customized: ☐ Generic: ☐

Indicate your level of satisfaction with the database format indicated above.

Not satisfied	Somewhat Satisfied	Satisfied	Very Satisfied
☐	☐	☐	☐

If you <u>are not</u> satisfied with the database format you are utilizing, please indicate what changes would make the format more useful.

1.

2.

3.

4.

5.

APPENDIX C

TIME LINE CHECK SHEET

Time Line Check Sheet

School Name:

Contact person:

Data Input

Data Input Scheduled Deadline _____

Data Input Completion Date _____

Randomization and Selection Information

Data due _____

Data Received _____

Returned to Program _____

Time Line Considerations

Was input completed within regular work day hours? (circle one) **Y** **N**

If no, how many hours beyond the scope of the regular work day were spent in completing data input? _____

If yes, indicate the impact completing data input had on other job requirements:

Was built into and balanced with other regular job requirements ☐
Was an additional job requirement ☐
Placed a great deal of stress on regular working conditions ☐

Did utilizing a more user friendly database program make the task more manageable?

(circle one) **Y** **N**

APPENDIX D

LETTER MERGE CHECKLIST

Letter Merge Checklist

School Name:

Contact Person:

Student Information:	**Correct**	**Incorrect**
Student Name:	☐	☐
Student Address:	☐	☐
Student Status Correct:	☐	☐

School Information:	**Correct**	**Incorrect**
School Name Correct:	☐	☐
School Address:	☐	☐
School Phone:	☐	☐
Letter content correct:	☐	☐

APPENDIX E

COMMUNICATION LOG

Communication Log

Program/Name	Communication Date	Type of Communication	Communication Reason	Problem Resolved?	Follow-up
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

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APPENDIX F

TECHNOLOGY SUPPORT AND VISITATION LOG

Technology Support and Visitation Log

Program Name	Support Visitation Date	Type of Support	Support Reason	Problem Resolved?	Follow-up
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

APPENDIX G

ELECTRONIC INFORMATION TRANSFERS

Electronic Information Transfers

School Name:

Contact Person:

Information Sender Name: _____

Trainer: _____ Receptor Name: _____

Has the sender been trained in electronic data transfer? **Y** **N**

Date data transfer is to take place: **<<Date>>**

Date data transfer took place: **<<Date>>**

Was data received? **Y** **N**

Were any transfer errors noted? **Y** **N**

List specific transfer errors:

File Size Sent: _____ k _____ MB

File Size Received: _____ k _____ MB

APPENDIX H

REVISED ELECTRONIC INFORMATION TRANSFERS

Electronic Information Transfers

School Name:

Contact Person:

Information Sender Name: _____

Trainer: _____ Receptor Name: _____

Has the sender been trained in electronic data transfer? **Y** **N**

Date data transfer is to take place: _____

Date data transfer took place: _____

Was data received? **Y** **N**

Were any transfer errors noted? **Y** **N**

List specific transfer errors:

File Size Sent: _____ k _____ MB

File Size Received: _____ k _____ MB

Student Randomization Process date: _____

Signature of Person Randomizing: _____

Witness to Randomization: _____

APPENDIX I

STUDENT SELECTION PROCESSES POST SURVEY

Magnet/Choice Programs
Student Selection Processes

Please indicate your response to the following statements utilizing the 1 through 6 scale as follows:

1 = unsatisfactory	3 = uncertain	5 = very good
2 = somewhat satisfactory	4 = satisfactory	6 = excellent

If an item does not pertain to your experience, please circle NA.

Microsoft Works Training

Training objectives were clearly communicated.	1	2	3	4	5	6	NA
Training objectives were reinforced with appropriate materials and handouts.	1	2	3	4	5	6	NA
Training materials assisted in the overall understanding of processes.	1	2	3	4	5	6	NA
Examples were used to reinforce key points.	1	2	3	4	5	6	NA
The training was practical.	1	2	3	4	5	6	NA
The training was relevant to my job duties.	1	2	3	4	5	6	NA
The training was valuable to my on-going skill enhancement.	1	2	3	4	5	6	NA
The training will enable me to apply new skills to my existing job tasks.	1	2	3	4	5	6	NA
The time allotted was sufficient.	1	2	3	4	5	6	NA
If insufficient time was allotted, the trainer returned for further training.	1	2	3	4	5	6	NA

Microsoft Works Trainer

The trainer maintained communication with trainees when necessary.	1	2	3	4	5	6	NA
The trainer maintained communication with trainees when requested.	1	2	3	4	5	6	NA
The trainer maintained a follow-up schedule when necessary.	1	2	3	4	5	6	NA
The trainer clearly answered questions.	1	2	3	4	5	6	NA
The trainer made the training relevant and meaningful to the tasks at hand.	1	2	3	4	5	6	NA
The trainer related all processes relevantly to the tasks ahead.	1	2	3	4	5	6	NA
The trainer was well organized.	1	2	3	4	5	6	NA
The trainer was positive.	1	2	3	4	5	6	NA
The trainer was knowledgeable.	1	2	3	4	5	6	NA
The trainer was helpful.	1	2	3	4	5	6	NA
The trainer was always willing to assist.	1	2	3	4	5	6	NA
I felt comfortable requesting assistance from the trainer.	1	2	3	4	5	6	NA

As I learned the new system, I felt confident with processes and procedures.	1	2	3	4	5	6	NA
I am satisfied with the communication between the trainer and myself.	1	2	3	4	5	6	NA

First Class System

Are you currently on-line utilizing the First Class system?	Y	N
Did you find the First Class training useful?	Y	N
Did the initial training enable you to:		
easily get on-line	Y	N
easily connect to the server	Y	N
Do you find the First Class system an effective means of communication?	Y	N
Was follow-up support offered to you through the training session?	Y	N
Did follow-up support present itself from the First Class trainer?	Y	N
If you are not using the First Class system, do you foresee the system as:		
efficient	Y	N
useful	Y	N
a time saving component	Y	N

ADDITIONAL COMMENTS:

For Principals, Assistant Principals and Program Coordinators only:

I am more content knowing that all data is maintained within the home school office.	1	2	3	4	5	6	NA
I am more confident about the results of the student database since student letters are generated from within the school program.	1	2	3	4	5	6	NA
I am satisfied with the randomization process.	1	2	3	4	5	6	NA
I am satisfied with the training process.	1	2	3	4	5	6	NA
I am satisfied with the support process and results.	1	2	3	4	5	6	NA
I am satisfied with the overall process changes this year.	1	2	3	4	5	6	NA
I am satisfied with the equipment and upgrades I have received or am expecting to receive.	1	2	3	4	5	6	NA

ADDITIONAL COMMENTS:

APPENDIX J

NEEDS ASSESSMENT

Magnet/Choice Programs

Student Application Process
Needs Assessment/Information Request

PLEASE RETURN THIS TO:

Please indicate who will be involved in data base and electronic information transfer training .

Name	**Position/Title**
1.	
2.	
3.	
4.	
5.	

Who will be the contact person for scheduling training?

Phone number :

Please indicate the hardware platforms and configurations you have available.

(Ex: PC 486/DX2, 50 Mhz, 500mb hard drive, 8 Mg RAM;
Power PC 6100/66, 500 Mg hard drive, 16 Mg RAM)

Computer(s):

Printer(s):

Do you need assistance in indicating the hardware components at your site? Yes No

Current Data Base Software/Version:

Current Word Processing Software/Version:

Modem (circle one) Yes No

Current Telecommunications Software/Version:

Are you currently utilizing Fox Pro? Yes No

If you had the opportunity to utilize a more user-friendly integrated software package, would you prefer to do so? Yes No

If yes, which would you prefer? Microsoft Works Claris Works

Does your site own either of these packages? Yes No If so, which?

Would your staff consider using either of these packages if the packages were provided for your site? Yes No If so, which?

Would you prefer to utilize a program-specific customized data base format? Yes No

Would you prefer to utilize a generic data base format? Yes No

What days throughout the summer session are the individuals to be trained available?

Check: Monday_____ Wednesday _____

Tuesday_____ Thursday _____

What month is best for your training needs? July _____ August _____ September _____

When does your staff prefer group training? Morning _____ Afternoon _____ Either _____

For on-site follow-up training and technology support, is your site interested in:

Check: Individual training _____ Phone Support _____ Group training _____

All _____ Any _____

Any suggestions or concerns?

APPENDIX K

MICROSOFT WORKS 4.0 FOR MACINTOSH DATABASE PROCESS SUMMARIES

Microsoft Works 4.0 for Macintosh

Database Process Summaries

Mary C. Black
588-6208

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Examples:

- Data View: Individual Records
- List View: All Records
- Word Processing Form
- Word Processing Merge
- Labels
- Labels starting from middle
- Simple Report with Calculations

Creating a Database

Start the Works Program.

Select the document type:

- In the start-up dialogue box, double click the **Database** button/icon.
- If there is no start-up dialogue box, select **Create New File** from the **File Menu**.

The **New Field** dialogue box appears. You must now **define the fields** for each record.

- Type in the name for the first field.
- Select the **Type of Field**, and where necessary the **Appearance** of the field.
- Click **Ok** to go to the next **New Field** dialogue box.
- **Continue** with this process until all of your fields are defined.
- When finished click **Done**. A **dialogue box** will ask if you want to **create a form**.
- Select **No** to view the database format in **List View**.
- Select **Yes** to view the database format in **Form View**.

Organizing your Database Layout

The next step is to **arrange the fields** into the desired order.

In **List View** move the field:

- Place the pointer on the field name (header) until a small hand appears.
- Drag the field to the top of the field next to where it will be positioned.

Create a **Form/Data View** to view one record at a time:

- Go to the **Insert Menu**, and select **Form**.
- Type a **Name** for the **Form**.
- Click **Ok** to create a form the same size as a page.
- An **Insert Fields Dialogue Box** will appear. **Select** the **records** desired for the form.
- The **Insert Fields Dialogue Box** allows you a variety of formats for your page.
- Click **Done** when all desired fields are inserted.

Form View, *contd.*

*You are now in the **Design View**.*

This is where boxes may be moved, sizes may be changed, and formats may be applied.

You may design up to 16 different forms. Forms can include some or all of the database fields. To switch forms, go to the **View Menu**. Click **Forms**. Select the form from the **pop-up** menu.

Handles, tiny black squares, mean that all of the boxes are selected.

- Go to the **Format Menu.** Select **Alignment.**
- **Select** the desired **alignment**. *Alignment changes affect all views.*
- Go to the **Format Menu**. Select **Field Settings**.
- Click the **Show Borders Around ...Field Name** and **...Field Data** boxes.
- Click **Show Field Name**. Click **Ok**.
- **Click away** from all boxes to **deselect.**
- **Click** on the first **field** to be placed on the form.
- Handles will appear. **Drag** the **field** to the desired location.
- To **size** the **field**, drag the middle handle on the far right.
- To see the **full field name**, drag the far left handle to the left.
- **Release** the handle and the field name shows.

Tab Order, the fields when the fields are arranged as desired.

- Go to the **Format Menu.** Select **Tab Order.**
- **Numbers** appear over the **data entry fields**.
- A **Tab Order Dialogue Box** appears.
- **Highlight** the **field** name.
- **Click** the **large arrows** until the desired tab number is shown on the **Design View**.
- Continue until the design follows are logically numbered order. Click **Ok.**

After completing the **Tab Order:**

- Go to the **View Menu** and select **Data View**.

*You are now ready to **input data** into the **Data View**, or go to the **List View** to input.*

Entering Data into Fields

To enter data into fields in the **List Form**:

- **Click** in the **cell** in which you want the data.
- **Type** the data. (Notice that the data appears at the top below the tool bar.)
- **Click** the **Checkmark** in the entry bar to **input** data into the cell.
- Press the **right arrow key** to input data and move to the **next field** in the **same** record.

OR - Press the **Tab Key** to input data and move to the **next field** in the **same** record.

OR - Press **Return** to move **down** to the **same field** in the **next record**.

OR - **Click** the **X** to **delete** the data.

- Move to a **previous field** by holding down the **Shift Key** and pressing the **Tab Key.**

To enter data into fields in the **Data View:**

- **Click** in the **cell** in which you want to input data.
- **Type** the data. (Notice that the data appears at the top below the toolbar.)
- **Click** the **checkmark** in the entry bar to **input** data into the field.
- Press the **right arrow key** to input data and move to the **next field** in the **same** record.

OR - Press the **Tab Key** to input data and move to the **next field** in the **same** record.

OR - Press **Return** to input data and to move to the **next field** in the **same record**.

OR - **Click** the **X** to **delete** the data.

- Move to a **previous field** by holding down the **Shift Key** and pressing the **Tab Key.**

To Switch Views

View commands are located under the **View Menu.** View records in **List View** or **Data View.**

The **Design View** allows you to design a specific form, or to redesign the **Data View**.

- Click on the **View Menu** and select the desired view.
- ***SHORTCUT:*** Hold down the **Open-Apple Command Key** and press:
  - **1** to get to the **List View**
  - **2** to get to the **Data View**
  - **3** to get to the **Design View**

Formatting List View

Change the appearance of the **List View** on the screen.

Change the **Column Width:**

- **Point** to the **left** or **right** edge of the column **header** until the adjust icon appears.
- **Drag the border** either left or right to make the column wider or smaller.

To **Move Columns:**

- **Click** on the **header** to select the entire column.
- Place the pointer on the **column header** (until the **small hand** appears).
- **Drag** the column; place it **between** the two columns where it is to be placed.
- **Release** the **mouse** button.

Switch Gridlines Off:

- Go to the **View Menu**.
- Select **Gridlines**. The checkmark is removed, and the gridlines turn off.
- Gridlines are turned on by selecting Gridlines so that a checkmark is beside the word.

Switch to Data View and notice that no changes have been made to the Data View

Formatting Data View

To change the appearance of the **Data View** on the screen, switch to **Design View**.

Change **Field Name Size:**

- Click on **Field**. Place the **pointer** on the "**handle**" to the **far left** near the field name.
- **Drag** to the right to make the field name area smaller or to the left to make it larger.

Change **Field Input Size:**

- Click **Field.** Place the **pointer** on the middle "**handle**" at the **far right** of the field.
- **Drag** to the right to make the field input area larger or to the left to make it smaller.

Move Fields:

- **Click** on the **field**, and **drag** it to the desired area.

Formatting Fields

To **change Text:**

- Click any **field in Design View**, or click any **column/field in List View**.
- Go to the **Format Menu**.
- Select **Font and Style**.
- Select the **Font and Style** desired, and click **Ok**.

In list view entire fields are changed or all records are changed.

*In **Design View**, field input and field name change.*

*Changes do not carry over form **List View** to **Data View**.*

To **change Alignment:**

- Click any **field**.
- Go to the **Format Menu**. Select **Alignment** and **highlight** the desired alignment.

If alignment is changed in List View, it is also changed in Design Data View.

To **change size:**

- Click **field**. Go to the **Format Menu**. Select **Font and Style**. **Type** in new **size.**

Changing size in one view does not affect another view.

To change **field format:**

- Go to the **Format Menu**. Select **Format Field**.
- Select the **Type** of format for the field.
- Formats include **Number, Text, Date, Time, and Serialized**.
- **Number, data and time** selections prompt you for the desired **Appearance**.
- **Select** as desired.
- Fields may include **calculations**.
- Select **number** and **formula** to **define calculations**.

Formats include entire columns fields in List View and all fields in Data View.

Moving through Records

There are **three methods** of **Moving through Records**.

In **List View** and **Data View**.

Use the **Navigation Tool**:

- If the navigation tool is not present on the desktop -
  - Go to the **View Menu**.
  - Select **Tool Palette**. The number showing is the current record.
  - **Move** the **Tool Palette** by dragging it from the title bar.
- Move to the **next record** by clicking the **right arrow**.
- Move to the **previous record** by clicking the **left arrow**.
- To move directly to **any record**, click-hold the tool slider and move to any record.

Use the **Menu Bar:**

- To go to **Next Record**, hold the **Open-Apple/Command Key** and press the = sign.
- To go to **Previous Record**, hold the **Open-Apple/Command Key** and press the - sign.

Use the **View Menu:**

- Select **Next Record.**
- Select **Previous Record.**

To **Move** from **Field to Field**:

- Press the **Tab Key** to move **forward**.
- Hold the **Shift Key** and press the **Tab Key** to move **backward**.

*In **List View** the **scroll bars** may also be used to move through records.*

*Only use **scroll bars** in **Data View** when there are too many fields to fit in the window.*

Editing Entries

In **Data View:**

- **Click** on the **entry** to be edited.
- **Click** on the **formula bar** at the top of the window (where you see the data).
- Modify or delete the data.

To accept the change:

- Click the **checkmark** to the left of the entry. (The same cell remains highlighted.)

OR - Press **Return** (moves to the next field).

OR - Press **Tab** (moves to the next field).

- Press **X** to **delete** the **change** or new entry.

In **List View:**

- **Click** on the **entry** to be edited.
- **Click** on the **formula bar** at the top of the window (where you see the data).
- Modify or delete the data.

To accept the change:

- Click the **checkmark** to the left of the entry. (The same cell remains highlighted.)

OR - Press **Return** (moves down to the next record).

OR - Press **Tab** (moves to the next field).

- Press **X** to **delete** the **change** or new entry.

Deleting Fields

To delete an entire field in **List View**:

- Click the **column header** of the field you wish to delete.
- Go to the **Insert Menu**, and select **Delete Field**.
- A **prompt box** will ask if you wish to **permanently delete** the information in the field.
- Select **Ok** to continue, or **cancel** to cancel.

NOTE: ***YOU CANNOT UNDO THIS FUNCTION OR RECOVER THE FIELD ENTRIES.***

Deleting Fields, *contd.*

Fields may not be deleted from Data View. ***Data View modifications*** *are made in* ***Design View.***

To delete fields from **Data View**, go to the **Design View**

- Go to the **View Menu** or hold the **Open-Apple key** and press **3**.
- **Select** the **field** to be deleted.
- Go to the **Insert Menu**. Select **Delete Field**.

NOTE: ***FIELDS DISAPPEAR WITHOUT WARNING.***

YOU CAN UNDO THIS (Edit Menu), BUT IT MUST BE DONE IMMEDIATELY.

Adding Fields

To **add a field** to **Data View**:

- first **switch** to **Design View**.
- Go to the **Insert Menu**.
- Any field previously removed from **Design or List View** will appear as a selection.
- Select a **previous field**, or select **New Field**.
- When **New Field** is selected, the **New Field Dialogue Box** appears.
- **Name** the field. Designate the field **type**, and click **Ok**.
- The **Insert Fields Box** reappears.
- **Highlight** the desired **field**. Click **Insert Field**. Click **Done**.
- To format the field, go to the **Format Menu**. Select **Field Settings**.
- Indicate changes. Click **Ok.** Drag the new field to the desired location.
- Remember to change the **Tab Order** of the new setup.

To **add a field** to **List View**:

- Go to the **Insert Menu**. Select **Field... Name** the field. Click **Ok**.
- **Click** the **header** to highlight the field (column) and **drag** to the new position.

NOTE: ADDING FIELDS TO LIST VIEW DOES NOT AFFECT DATA VIEW.

ADDING FIELDS TO DESIGN VIEW AFFECTS LIST AND DATA VIEWS.

Adding Records

To **Add** a record to **Data View:**

- To place the record at the end of the records, move the navigator to the end.
- An inserted record takes the number place of the record showing.

Example: Record 3 shows. Insert record. New record becomes #3; previous # 3 becomes #4.

- Go to the **Insert Menu**.
- Select **Record.** The new record is inserted.

To **Add** a record to **List View:**

- Place the record at the end of the records:
  - move the navigator to the end

OR

  - scroll to the bottom of the list and click the next empty cell.

- Place the record within the list:
- Click a cell. The new record is placed above the highlighted cell.
- Go to the **Insert Menu**.
- Select **Record**. The new record is inserted.

Deleting Records

To **delete** a record from **List View** or **Data View**:

In **List View**:

- Click the empty space at the left of the record to be deleted.
- The record highlights and becomes the current record.
- Go to the **Insert Menu**.
- Select **Delete Record**.
- The selected **record disappears**, and the records below move up.

NOTE: ***RECORD DISAPPEARS WITHOUT WARNING.***

YOU CAN UNDO THIS (Edit Menu), BUT IT MUST BE DONE IMMEDIATELY.

Deleting Records, *contd.*

In **Data View:**

- Use the **navigator** to **show** the **record** to be deleted.
- Go to the **Insert Menu**.
- Select **Delete Record**.
- The selected **record disappears**, and the records below move up.

NOTE: ***RECORD DISAPPEARS WITHOUT WARNING.***

YOU CAN UNDO THIS (Edit Menu), BUT IT MUST BE DONE IMMEDIATELY.

Sorting Records

Records may be sorted using three fields.

To **Sort by Fields** in either **List View** or **Data View**:

- Go to the **Tools Menu**.
- Select **Sort Records...**
- Use the **pop-up menus** to select the criteria.
- **Click** the button next to the desired **sort order** (A to Z, Z to A).
- Select **Ok** when all fields and orders are selected.

NOTE: ***YOU CAN UNDO THIS (Edit Menu), BUT IT MUST BE DONE IMMEDIATELY.***

Finding/Filtering Records

To **find** and **view** only certain records:

- Go to the **Tools Menu**. Select **Create New Filter...**
- In the **Filter Name** box type a name for the filter.
- In the **Field**: pop-up menu, select the field filter.
- In the **Comparison** pop-up menu, select the condition.
- In the **Compare to:** box type the field comparison. **Add** more conditions or click **Ok**.

Finding/Filtering Records, *contd.*

- The **Navigation Tool** indicates the name of the **Filter** being shown.

To **Show All Records**:

- Go to the **View Menu**. Select **Forms**. Select **Show All.**

OR - Go to the **Navigation Tool**. Click the bottom **pop-up menu**. Select **Show All**.

Previously created filters may be selected from the **Navigation Tool** or from the **View Menu**.

Filters are applied to all records in the database.

To **Invert** a filter:

- Select (Apply) a filter from the **Navigation Tool.**

OR - Go to the **View Menu**. Select **Filters**. Choose **Filter** from the **pop-up** menu.

- Go to the **Tools Menu**. Select **Modify Filter**.

- Click the **Invert Filter Box**. The records not applied to the filter will appear.

- To re-apply the filter, go to the **Tools Menu** and **deselect Invert Filter Box**.

To **Modify a Filter**:

- Select (Apply) a filter from the **Navigation Tool**.

OR - Go to the **View Menu**. Select **Filters**. **Choose Filter** from the **pop-up** menu.

- Go to the **Tools Menu**. Select **Modify Filter**.

- **Modify** the conditions. Click **Ok**.

To **Delete a filter**:

- **Select a Filter** from the **Navigation Tool** or from the **View Menu**.

- Go to the **Tools Menu**.

- Select **Delete Filter**.

- A **Dialogue Box** appears. To **delete** select **Ok**. To **cancel, click cancel**.

NOTE: ***YOU CAN UNDO THIS (Edit Menu), BUT IT MUST BE DONE IMMEDIATELY.***

Printing the Database

To **Print** from **Data View:**

- You may **Preview** the document.
- Go to the **File Menu**. Select **Print Preview**.
- **Print** if satisfied with the format, **or cancel** if not.
- Each record will print on its own page.

To **Print** from **List View**:

- First, go to the **File menu** and select **Page Setup**.
- Select either the **portrait** (tall) or **landscape** (wide) **orientation**.
- Click **Document** for **margins** and other format setup.
- Click **Ok** in each **Dialogue Box** when done.
- Records must be **Marked for Printing** when in **List View**.
- Go to the **Tools Menu**. Select **Mark Records for Printing**.
- Select **all records**.
- **Click** once in the box in the **upper left corner** of the **List View** layout.
- Select **individual records**. Click the record box to the far left of the record.
- **Preview** the document if desired.
- **Print** if satisfied with format; **cancel** if not.

To **Print Selected Records/Fields**:

- **Mark Records for Printing** (to print only selected records).
- Apply a **Filter** (Find Records) (to print specific records).
- Apply a **Sort** through Records (to print specific records).
- Print from a **Report** (to print specific fields and/or records).
- **Preview** the document if desired.
- Go to the **File Menu.** Select **Print.**

Use the Print Preview and Print Icons on the Toolbar.

Print Merge

To merge from a database to a word processing document form, first open a word processing file and your database file.

When preparing to merge documents:
- Create and prepare the word processing form.
- Place the cursor in the word processing form where the first database field is to be placed.
- Leave one space after the final word before the merge; if words follow the merge, leave an additional space before the next word.

- Go to the **Format Menu.**

- Select **Database Merge Options**.

- In the **dialogue box**, click the following:

  - **Show One Record Per Document**

  - **Show Field Names**

  - **Slide up and Over Blank Fields When Printing**

- Click **Ok** to return to the document.

- **Place** the **cursor** in the word processing document where the first field is to be placed.

- Go to the **Insert Menu**.

- Select **Database Field**.

- If necessary, **drag** the **dialogue box** up or down so that you can see the insertion point.

- If the database is not open, you will be prompted to open the database.

- If the database is open, select the field to merge from the **Select Field to Merge** box.

- **Double-click** the **field** and it will insert into the document. Click **Done**.

- Place the cursor at the **next insertion point**.

- Go to the **Insert Menu.**

- Select **Database Field**, **double-click** the **next field entry**, and click **Done**.

- **Continue** with this process until all desired fields have been inserted into the document.

When the form document is complete, the placeholders will show where data will be placed when the files are merged.

Remember to SAVE the merge data onto the word processing document.

Preparing to Print the Merge

- Before printing, the word processing form must be prepared for the merge.
- Be sure that the word processing form and the database file are open and on the desktop.
- If the database is not open, the word processing field placeholders will indicate **File Not Open**.

Before Printing, Works must be told to **Show Field Data**.

- Go to the **Format Menu**.
- **Click** the button beside **Show Field Data**.
- Click **Ok**.

The first set of data will appear on the word processing document in place of the placeholders.

To ensure that the merge will take place:

- **Preview** the document merge.
- Go to the **File Menu**. Select **Print Preview**. (*Or use the toolbar icon.)*
- Click **Next** and **Previous** buttons to preview the merge.
- Select **Print** or **Cancel**.

If only specific records are to be printed:

- **Apply** a **Sort or Find** process

OR - **Mark Database records for printing (List View)**

Continue the printing process.

Printing Mailing Labels

Before **creating mailing labels**, the database file must be open.

- Go to the **Insert Menu**.
- Select **Form**.
- Click **Label** button.
- Select the **Label product number** (Avery 5160 is common).

Click **Ok.**

The **Insert Fields Dialogue Box** will appear. On the **desktop, a label** shows.

Be sure that **Size Field to Data** is selected and that **Show Field Name** is **NOT** selected.

Place the fields on the labels:

- **Highlight** the first **field**. Click **Insert Field**.
- When a line is completed, click **New Line**.
- Continue with this process until all required data is on the label. Click **Done**.
- When fields are selected, they may be moved and formats may be changed.
- **Click away** from the boxes to **deselect** them.

Preview the records in the label layout:

- Go to the **View Menu**.
- Select **Data View**. The data from the first record will appear on the label.
- Go to the **View Menu**. Select **Next Record**.

Print Preview:

- Go to the **File Menu** (*or use the print icon on the toolbar*).
- Select **Print Preview**. (*Click the magnifier to enlarge; double-click the hand to shrink.*)

Print:

- Select **Print** from the **Print Preview Page** or cancel.
- Go to the **File Menu**.
- Select **Print** from the **Menu** and from the **Print dialogue box**.

NOTE: To **Print** only **Selected Records** as Labels, **Apply** a **Sort** or **Find (Filter)**.

If you do not use an entire sheet of labels, at the print dialogue box, enter the row and column where you want the printing to begin.

Reporting

The section on reporting gives you an example of what is found in the HELP MENU of Microsoft Works. The information included in this manual in no way gives complete details as to how to create and manipulate a report. For further information, please use the HELP MENU, the Microsoft Works Manual that is included with your software, or feel free to contact me at the phone number listed on the front of your folder.

BEST COPY AVAILABLE

How to... Create a report

A report is a list of all or part of the information in a database. Often, reports are the best way to print only the information you want from a database. Using the ReportCreator, you can arrange, group, and filter database information, and have Works calculate and print subtotals and totals for you. In contrast to list view, a report includes only the fields you want, arranged and grouped according to your specifications. Each database can have up to 16 reports.

This topic teaches you how to create a basic report, which doesn't feature sorting, grouping, or using statistical calculations.

To create a basic report

1. From the Insert menu, choose Report.

   Works displays the New Report dialog box.

2. In the Report Name box, type a name for the report. The name can contain up to 31 characters.

3. If you don't want the report name to be used as the report title on the first page of the report, clear the Show Report Name On First Page option.

4. To apply a particular font, font size, or font style to the report, click the Change Font And Style button, select the options you want, and then click the OK button.

5. To move to the Fields section of the dialog box where you can specify which fields you want in the report, click the Fields tab.

   Works displays the Fields section of the New Report dialog box.

6. In the Fields Available box, Works displays a list of the fields in the database. Click the first field you want in the report, and then click the Add button.

   Works moves the field to the Fields In Report box.

   TIP: To add all the fields in the order they appear in list view, click the Add All button. You can also select and add several adjacent fields at once by clicking the first field, holding down the SHIFT key, clicking the other fields you want to add, and then clicking the Add button.

7. Repeat step 6 until you have added all the fields in the order that you want them to print in the report.

   If you need to remove a field from the Fields In Report box, click the field, and then click the Remove button.

8. In the Display Options box, click the options you want; clear the options you don't want.

   NOTE: The options you select affect how the report is printed.

   Click the More button below for information about the display options.

   more

9. To create a basic report containing all the information in your database, click the Done button.

Creating a custom report

To learn how to create a custom report from selected records, to group similar records together, or to perform statistical calculations on specific fields, click one of the topics in the following table.

To learn how to	Click this topic
Sort report information	How to... Sort and group report information
Group report information	How to... Sort and group report information
Select specific records for the report	How to... Apply a filter to a report
Perform statistical calculations on specific fields (total, average, and so on)	How to... Calculate report information

See also...

How to... Add and delete report fields
How to... Change the appearance of a report
How to... Move, resize, and align report fields

-end-

Individual Student Records

First Name	Flo	MI	N.	Last Name	Gice		
Address	9934 Post Office Drive			Phone	813 347-3478		
City	St. Petersburg			State	FL	Zip	33703
Date of Birth	01-03-78	Sex	F	Race	NB	SS #	094-61-8025
FL student ID #	5287-345678			Stu Status	Accepted		

Parent or Guardian Name	Flo N. Gice-Burg
Parent or Guardian Address	9934 Post Office Drive
City State & Zip	St. Petersburg
Business Phone	
Residence?	Mother

First Nam	M I	Last Nam	Address	City	State	Zip	Phone	Date of Bi	Sex	Race
Doa	C.	Do	12365 Dancer Blvd.	St. Petersburg	FL	33703	813 327-9048	3-15-78	F	B
Roste	D.	Duck	34 Grilled Avenue	St. Petersburg	FL	36890	813 324-5689	2-8-90	F	B
Chad	A.	Nooga	23 Railroad Way	Largo	FL	34654	813 345-6789	6-30-79	M	B
Flo	N.	Gice	9934 Post Office Drive	St. Petersburg	FL	33703	813 347-3478	01-03-78	F	NB
Tom	A.	Hawk	239 Waterside Blvd.	Madeira Beach	FL	33315	403-372-0380	11-17-78	M	NB
Shefl	D.	Ponee	900 Rideum Street	Largo	FL	34567	813 586-4059	10-13-91	M	NB
Rea	L.	Te	86 Sellers Way	Seminole	FL	34642	813 397-6473	4-1-79	F	NB

SS #	FL student ID #	Parent or Guard	Parent or Guardia	City State & Z	Business Phor	Residence
				St. Petersburg		Mother
234-45-6721	5290-123956	Cookie D. Duck	34 Grilled Avenue	St. Petersburg		Dad
456-27-4820	5287-867124	ChooChu	23 Railroad Way	Largo		Mother
094-61-8025	5287-345678	Flo N. Gice-Burg	9934 Post Office Dr	St. Petersburg		Mother
373-93-5080	5291-040339	Flyin G. Hawk	239 Waterside Blvd	Madeira Beach		Dad
234-98-0956	5291-239503	Shetland Ponee	900 Rideum Street	Largo		Dad
345-09-6937	5288-236987	Remacksrea L. Te	86 Sellers Way	Seminole		Mother

Date

DummyDB:First Name DummyDB:MI DummyDB:Last Name
DummyDB:Address
DummyDB:City DummyDB:State DummyDB:Zip

Dear DummyDB:First Name:

I am happy to report that you have been accepted into our program. We need to have verification from you that you plan to attend our program. So, please, DummyDB:First Name, call our office as soon as possibe to verify acceptance.

Thank you for your response.

Sincerely,

John Q. Magnet

Date

Rea L. Te
86 Sellers Way
Seminole FL 34642

Dear Rea:

I am happy to report that you have been accepted into our program. We need to have verification from you that you plan to attend our program. So, please, Rea, call our office as soon as possibe to verify acceptance.

Thank you for your response.

Sincerely,

John Q. Magnet

Doa C. Do
12365 Dancer Blvd.
St. Petersburg FL 33703

Roste D. Duck
34 Grilled Avenue
St. Petersburg FL 36890

Chad A. Nooga
23 Railroad Way
Largo FL 34654

Flo N. Gice
9934 Post Office Drive
St. Petersburg FL 33703

Tom A. Hawk
239 Waterside Blvd.
Madeira Beach FL 33315

Shefl D. Ponee
900 Rideum Street
Largo FL 34567

Rea L. Te
86 Sellers Way
Seminole FL 34642

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12365 Dancer Blvd.
St. Petersburg FL 33703

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St. Petersburg FL 36890

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Tom A. Hawk
239 Waterside Blvd.
Madeira Beach FL 33315

Shefl D. Ponee
900 Rideum Street
Largo FL 34567

Rea L. Te
86 Sellers Way
Seminole FL 34642

Race

Last Name	City	Sex	Race	SS #	FL student ID
Do	St. Petersburg	F	B		
Duck	St. Petersburg	F	B	234-45-6721	5290-123956
Nooga	Largo	M	B	456-27-4820	5287-867124
Number: 3					
Gice	St. Petersburg	F	NB	094-61-8025	5287-345678
Hawk	Madeira Beach	M	NB	373-93-5080	5291-040339
Ponee	Largo	M	NB	234-98-0956	5291-239503
Te	Seminole	F	NB	345-09-6937	5288-236987
Number: 4					
Number: 7					

APPENDIX L

MICROSOFT WORKS 3.0 FOR WINDOWS DATABASE PROCESS SUMMARIES

Microsoft Works 3.0 for Windows

Database Process Summaries

Mary C. Black
588-6208

Microsoft Works 3.0/Windows
Database Training

Creating a Database

Start the Works program.

Select the document type:

- In the start-up dialogue box, select the ***Database*** button.
- If there is no start-up dialogue box, select ***Create New File*** from the ***File Menu***.

[Select the maximize button *at the far right of the Data1 title bar to maximize to a full page.]*

You are now in the Database ***Form View*** (***View Menu, Form***).

Define the **fields** for each record.

- Type the **field name** followed by a colon [**:**].
- The colon signifies that the entry is a field name, rather than just text.
- After you type a field name, the **Field Size** dialogue box will appear.
- Select an appropriate width for the field.
- Typically, the 1" height is sufficient unless you are using a special format.
- Click OK.
- Continue to create additional field names to complete your record.

Remember to type a colon after each field name.

Remember to <u>SAVE</u> YOUR WORK as you progress.

Organizing your Database Layout

The next step is to **arrange** your **fields** in the order you desire. If you are in the:

Form View (***View Menu, Form*** selected)

- move a field by clicking on the field and dragging it to the desired location.

List View (***View Menu, List*** selected)

- move fields by one of the following methods:
- Choose ***Select Field*** from the ***Edit Menu*** and then drag the field to the desired location.
- Click on the field name so that the column highlights, and then drag the field to the desired location.

Entering Data into Fields

To enter data into fields

- Click the underline to the right of the field and enter the data.

Move to the next field by pressing the **Tab** key.

Move to a previous field by holding down the **Shift** key and then tapping the **Tab** key.

To create a new record:

- From the final field of a record, press **Tab** and a new, blank record will appear.
- The record number is indicated at the lower left of the window.

To Switch Views

View commands are located under the ***View Menu.***

Records may be viewed in the ***Form View*** or the ***List View***.

- Click on the ***View Menu*** and select the desired view.
- ***SHORTCUT:*** Tap the F9 key to switch between views.

Moving through Records

There are several ways to move through records in a database.

First know what record you are viewing.

- Look at the numbers in the lower right corner of the window.
- The number in the second box to the left indicates the current, or active, record number.
- The numbers in the far left corner indicate the active record/total records.
    - Example: 3/10 = The third record is active out of ten records.

To move through records in **List View:**

- Use the scroll bars.

To **Move** through records in **Form View:**

- Use the four direction arrow buttons at the bottom left of the window.
- Click:
    - for a **New Record.**
    - to go to the **First Record.**
    - to go to **Next Record**.
    - to go to **Previous Record.**

NOTE:
*You cannot scroll from record to record in **Form View**.*
*Scroll bars are only used in **Form View** when there are too many fields to fit in the window.*

To **Move** to a **specific record:**

- Go to the **Edit Menu**
- Select **Go To,** and type the record number which you wish to go to.
- ***SHORTCUTS to the GO TO Dialogue Box:***
    - Tap F5.
    - Double click the record indicator at the lower left of the window.

Editing Entries

In either **Form** or **List View**, you may edit data entries.

In **Form View:**

- Click on the entry to be edited.
- Click on the formula bar at the top of the window (where you see the data).
- Modify or delete the data.
- Click the **checkmark** to the left of the data, or press **Enter** to accept the change.
- Click the **X** to the left of the data, or press **Escape** to cancel the editing.

In **List View:**

- Click on the entry (cell) to be edited.
- Follow the **same procedures** as for **Form View.**

Deleting Fields

To **Delete** an entire **field** in **Form View:**

- Click on (highlight) the **field name.**
- Press the **Backspace** or **Delete key.**

NOTE: ***YOU CANNOT UNDO THIS FUNCTION.***

To **Delete** an entire **field** in **List View:**

- Click the **column header** of the **field** you wish to delete.
- Go to the **Insert Menu** and select **Delete Record/Field.**

NOTE: ***FIELDS DISAPPEAR WITHOUT WARNING.***

YOU CAN UNDO THIS FUNCTION, BUT IT MUST BE DONE IMMEDIATELY.

Deleting Records

To **delete** an entire **record** in **Form View** you may either:

- Hold down the **Shift** and **Control Key** and press **X.**
- To paste the record back into the document hold down the **Control Key** and press **V.**
- Pasting/Retrieving must be done immediately or the record will be lost.

OR

- Select the record you wish to delete.
- Go to the **Insert Menu**
- Select **Delete Record.**

To **delete** an entire **record** in **List View:**

- Click on the **row header** (on the left side of the window) to select the whole record.
- Go to the **Insert Menu.**
- Select **Delete Record/Field.**

OR

- Click on the **row header** (on the left side of the window) to select the whole record.
- Hold down the **Control Key** and press **X**.
- To paste the record back into the document hold down the **Control Key** and press **V.**

Adding Records

To add a **Record** to the **Form View:**

- Select the last record in the database.
- **Tab past** the **last field** and you will be at the first field of the new record.

OR

- Go to the **Insert Menu**. Select **Record**.

To add a **Record** to **List View:**

- Go to the **Insert Menu**.
- Select **Record**.
- A record will be inserted at the **end** of the database.

To **add a record** at a **particular place** in the database:

- Click on the record line where the new record is to be inserted.
- Go to the **Insert Menu**.
- Select **Record**.

Adding Fields

To **add** a field to the **Form View:**

- Select a clear area (where you want the field) on the form.
- Go to the **Insert Menu.**
- Select **Field.**
- The **Field Dialogue Box** will prompt you for field name, width and height.

To **add** a field to the **List View:**

- Click on the **column** which will be **to the right of** where you want **the new field.**

(The new field will appear to the left of the selected column.)

- Go to the **Insert Menu.**
- Select **Record/Field**.
- Click the **field box**.
- A **new field** (with no field name) will appear to the **left** of the selected column.

To **name** the **field**:

- Click on the **field/column**.
- Go to the **Edit Menu**. Select **Field Name. Input** desired Field Name.

To **set field height** and **width**:

- Go to the **Format Menu**. Select **Record Height**. **Input** desired field height.
- Go to the **Format Menu**. Select **Field Width**. **Input** desired Field Width.

Customize the TOOLBAR with INSERT FIELD and INSERT RECORD BUTTONS.

Sorting Records

Records may be Sorted using three fields.

Each **sort field** can be designated as **ascending** or **descending** order.

To **Sort** by **fields**:

- Go to the **Tools Menu**.
- Select **Sort**.
- Using the arrow under the 1st field, select the **primary field** by which to sort.
- Select subsequent fields to sort by if desired.
- Select **Ok** when all fields and orders are selected.

Finding Recor

To **find** and **view** only certain records:

- Go to the **Edit Menu**.
- Select **Find**.
- **Type** the characters that you wish to find in the **Find What** text box.
- Click the **All Records button**.
- Click **Ok**.

You may **view** in **Form View** or in **List View**.

To **display** the **remaining records** that were **not selected** by the search:

- Go to the **View Menu**.
- Select **Switch Hidden Records**.

(This enables you to **switch** between the records that match the find query and those that do not.)

To **display** all records:

- Go to the **View Menu.**
- Select **Show All Records.**

The find command **does not discriminate** between characters and is not case sensitive.

Example: FL is the Find text. The state FL, and a name such as Florence will match the query.

Creating Queries

Queries allow you to find exactly the records you wish to display.

To **Create a Query**:

- Go to the **Tools Menu**.
- Select **Create New Query**.
- Click the arrow in the **Choose** section to **select a field** from the pop-up menu.
- Select the **field**; then click the arrow to select from the comparison field.
- Select a **comparison**; then click in the **Value box** and **type** the comparison **Value**.

Three query sentences may be used for each query; each query sentence specifies a condition.

To **Name** the **Query**:

- Double click in the **Query Name Box** at the top.
- Highlight the existing name and type a brief name that describes the query.

To **Apply** the **Query**:

- Click the **Apply Now** button.
- Only the records you queried for will be showing.
- Go to the **View Menu** and select **Show All Records** to return to all records.

To **Reapply** a **Query**:

- Go to the **View Menu**.
- Select **Apply Query**
- ***SHORTCUT:*** Tap the F3 key to reapply a query, and then select the desired query.

Formatting the List View

Change the appearance of the List View on the screen.

There are three methods that can be used to **change column width**.

Method 1:

- Click on any entry in the desired column.
- Go to the **Format Menu**.
- Select **Field Width**.
- **Type** in the desired **width**.
- Click **Ok** to view the widened column.

Method 2:

- Point to the right or left edge of the desired column header until the adjust icon appears.
- **Drag** the **border** either left or right to make the column wider or smaller.

Method 3:

- **Double Click** the desired **header**.
- The width will adjust to match the widest entry in the column.

To change **Column Height**:

- Use **methods 2 and 3 above**, but **use** the **record numbers** on the **left of the fields**.

OR - Go to the **Format Menu**

- Select **Record Height**, and **type** in the **desired height**.

To **Move Columns**:

- Click on the header to select the entire column.
- Place the pointer at the right or left edge of the column (not in the header).
- DRAG appears under the pointer.
- Drag the column; place it on the column that will be to the right of it.

Switch Gridlines off:

- Go to the **View Menu**.
- Select **Gridlines**. To turn Gridlines on again, complete the same process.

Add lines between columns:

- Select the desired **column header**.
- Hold down the **Shift Key** and **click** on the **column next to** the desired column.
- Go to the **Format Menu**, and select **Border.**
- Select which **side** to **add** the **line**; **select** the **color**; **select line size**.
- Click **Ok**.

Switch to Form View and notice that no changes have been made to the Form View.

Formatting the Form View

Change the appearance of the Form View on the screen.

There are two methods to changing field size:

Method 1:

- **Click** the **underline** after the desired field name.
- Go to the **Format Menu**.
- Select **Field Size**, and **type** the desired field **size**.
- Click **Ok**.

Method 2:

- **Click** the **underline** after the desired field name.
- Place the **pointer** on the **"handle"** shown **at** the **end** of the highlighted area.
- **Drag** the **highlighted area** until the desired size is reached.

Add **Labels** to the **Form View**:

- **Place** the **cursor** in the area where a label is to be placed.
- Type the **label name**. *Labels are not followed by colons.*

Move Labels and Fields:

- **Click** on the **field** or **label name**, and **drag** to the desired area.

Hide Field Names:

- **Click** on the **desired field name**.
- Go to the **Format Menu**; select **Show Field Name** (removes check mark).

Formatting Text

As in word processing, the database enables you to change **font, style, and size**.

To **change Text**:

- Click any **field name** or **entry** (Form View).
- Click any **entry** (List View).
- Go to the **Format Menu**.
- Select **Font and Style**.
- Select the **Font and Style** desired, and click **Ok**.

In Form View field names and entries may be changed.

In List View, only entries may be changed.

To **change Alignment**:

- Click any **field name** or **entry** (either in Form View or List View).
- Go to the **Format Menu**.
- Select **Alignment**.
- Select the **Alignment** desired, and Click **Ok**.

If alignment is changed in List View, the change will also occur in Form View.

Formatting Numbers

To change **number format**:

- Switch to **List View**.
- Click any **number entry**.
- Go to the **Format Menu**.
- Select **Number.**
- Click the desired number format. A sample will be shown in the **Sample Box**.
- Click **Ok**.

To Format an entire column of numbers, select the column and then go to the Format Menu.

Printing the Database

Use **Page Setup** under the **File Menu** to **set margins, paper size** and **orientation**.

To **Print** from **Form View**:

- **Preview** the document.
- Go to the **File Menu**.
- Select **Print Preview**.
- **Print** if satisfied with the format, **or Cancel** if not.

To **Print** from **List View**:

- **Preview** the document if desired.
- Go to the **File Menu**.
- Select **Print Preview.**
- **Print** if satisfied with the format, or **Cancel** if not.

To **Print Selected Records:**

- **Apply** an already developed **Query**, **or Create** then **Apply a Query**.
- **Preview** the document if desired.
- Go to the **File Menu**.
- Select **Print.**

When printing from Form View or List View, all records and fields are printed.

Applying a Query limits that being printed to selected records with all fields.

To print only certain fields, Reports must be created.

Customize the TOOLBAR with PRINT and PRINT PREVIEW BUTTONS.

Print Merge

To merge from a database into a word processing document, first open both files.

When preparing to merge documents:

- Place the cursor in the word processing document where the first database field is to be placed.
- Leave one space after the final word before the merge; if words follow the merge, leave an additional space before the next word.
    - Go to the **Insert Menu**. Select **Database Field**.
    - Click **Database** at the bottom of the dialogue window.
    - **Select** the name of the **database** that will be used for the merge.
    - **Double click** the name of the **database** to be used.
    - **Select the field** that is to be placed at the word processing insertion point.
    - **Double click** the **field, or** select **Insert**.
    - **Close** the **dialogue box**.
- Return to the word processing document; place the cursor at the **next insertion point**.
- **Proceed with the same process** as above until fields are placed at each insertion point in the word processing document.

SAVE *the merge data onto the word processing document.*

When **preparing to Print:**

- Go to the **File Menu**. Select **Print**.

Notice that there is an **X** in the **Print Merge** section at the bottom of the **dialogue box**.

- Click **Print Preview** to view the merge, or **Print** to print.

A dialogue box will appear prompting you to select the database with which to merge.

- Select the database by **double clicking** the **file name**.
- A **prompt** will appear asking if **all records** are to be **merged**.
- Select **Ok**.

The word processing document will now include the data as merged from the database.

If only specific records are to be merged, Apply a Query and then continue with the merge process.

Printing Labels

To **create Labels**:

- Create a new word processing document.
- Go to the **File Menu**.
- Select **Create New File**.
- Select **Word Processing**.

Set up the Label size and style:

- Go to the **Tools Menu**.
- Select **Envelopes and Labels**.
- Select **Mailing Labels**.
- Click the **Label Style pop-up menu** to see choices.
- Click the **label name and size** needed.
- Select the **database** with the names and addresses needed.
- Click the **Fields button**.
- Click the **Database button**.
- In the list of databases, select the **file** needed.
- In the **Fields: box,** double **click** the **fields** needed.

The field placeholder will appear in the Label box above.

- Press the **Enter key** to begin a new line.
- Return to the **Fields: box**, and double **click** the next **field** needed.
- Press the **Enter key** to begin a new line.
- Return to the **Fields: box**, and double **click** the next **field** needed.

Continue this process until all fields needed for the label are present in the Label Box.

Apply the placeholders to the word processing file:

- Click the **Create Label** button at the upper right side of the label dialogue box.
- The **placeholders** will **appear at the top** of the **word processing document**.

To Print Labels:

- Go to the **File Menu**.
- Select **Print**.
- A prompt box will appear for you to **select the appropriate database file.**
- A prompt box will ask if all records are to be merged. Click **Ok**.
- The **labels will print**.

To first **Preview the labels**, select **Print Preview** and **follow** the **prompt and dialogue boxes** as indicated above.

SAVE *the word processing document with the placeholders.*

Reporting

The section on reporting gives you an example of what is found in the HELP MENU of Microsoft Works. The information included in this manual in no way gives complete details as to how to create and manipulate a report. For further information, please use the HELP MENU, the Microsoft Works Manual that is included with your software, or feel free to contact me at the phone number listed on the front of your folder.

Reporting basics: 1 of 16

Introducing reporting

Beginning a Database report

More Info

Database reports organize and summarize database information for printing. They give you much more flexibility than you have when printing a document from form or list view. For example, when you create a report, you can:

- Specify which fields to include and where on the page to print them.
- Sort and group field entries.
- Count, add, average, and perform other calculations to show statistical information about groups.
- Add titles, subtitles, and explanatory notes that will enhance the report.

When creating and printing reports, you can also use the Find, Query, and Hide Record commands in form or list view to select the precise records you want to view and print.

The following are the basic steps in creating a report.

To	See
Create a new report	Creating a standard report
Modify a report by adding rows and columns and changing report contents	Modifying a report
Preview the report before printing	Previewing a document before printing
Print the report	Printing a document

APPENDIX M

RANDOM SELECTION/SERIALIZATION PROCESSES

For Microsoft Works 4.0 for Macintosh

Step 1:

- To **insert** a **field**, **click** on the 1st field in the list. Go to the **Insert Menu**. Select **Field**.
- A prompt box appears asking for a field name. Name the field **Formula**.
- Under **Type** click **Number.** Go to the **Formula or Default Value** section.
- Click **Formula.** In the box provided**, insert** the following **formula**: **=int(rand()*2000)**
  - This gives random numbers between 1 and 2000 for the entire field (column).
- Click **Ok**.

Step 2:

- **Insert** a new **field**. **Click** on the **Formula** field. Go to the **Insert Menu**. Select **Field**.
- **Name** the field **Random #**. Under **Type** click **Number**.
- Click **Ok**.

Step 3:

- Go to the **Formula** field. **Click** on the **field header** to select the entire field (column).
- Go to the **Edit Menu** and select **copy**.
- Click on the **Random #** field header (column label).
- Click in the first field of the **Random #** column.
- Go to the **Edit Menu** and select **Paste**.

Step 4:

- Select the **Random #** column. Go to the **Tools Menu**. Select **Sort records**.
- If it is not already listed , choose the field **Random # (select Lowest to Highest)**.
- This will Sort all records by random number (lowest to highest).

Step 5:

- Click on the **Formula field** header. Go to the **Insert** Menu. Select **delete field.** Delete the **Formula** field.
- **Highlight** the **Random #** field. Go to **Insert**. Click **Field**. Name the field **Series #**.
- Under the **Type** box select **Serialized**. **Increment** by **1**. Under **Appearance**, Prefix shall be blank, **Number** shall have **1** in the box, and Suffix shall be blank.
- Click **Ok**.
- The numbers associated with the random numbering will fill down the column.

For Microsoft Works 3.0 for Windows

Step 1:

- **Insert** a **field**. **Click** on the 1st field in the list. Go to the **Insert Menu**. Select **Record/Field**.
- Go to the **Edit Menu**. Select **Field Name**. Name the field **Formula**.
- **Click** on the **first record** in the **Formula** column.
- **Insert** the following **formula**: **=int(rand()*2000)+1**
  - This gives random numbers between 1 and 2000 for the entire field (column).

Step 2:

- **Insert** a **field**. **Click** on the **Formula** field. Go to the **Insert Menu**. Select **Record/Field**.
- Go to the **Edit Menu** and select **Field Name** (at bottom).
- **Name** the field **Random #**.
- **Highlight** the entire **field**.
- Go to the **format** menu. Select **number**. Select **Text**. Click **Ok**.

Step 3:

- Go to the **Formula** field. **Click** on the **field header** to select the entire field (column).
- Go to the **Edit Menu** and select **copy**.
- Click on the **Random #** field header (column label).

*[Go back to the format menu and select Number to be sure that the **Random #** field is formatted as text. If so Cancel, if not select Text and select Ok.]*

- Click in the first field of the **Random #** column.
- Go to the **Edit Menu** and select **Paste**.

Step 4:

- Select the **Random #** column. Go to the **Tools Menu**. Select **Sort records**.
- If it is not already listed , choose first field **Random # (select Ascend A)**.
- This will Sort by random number (lowest to highest).

Step 5:

- Select the **Formula field.** Go to the **Insert** Menu. Select **delete record/field** to delete the **Formula** field.
- **Insert a new field** to the **left of** the **Random #** field.
- Go to the **Edit Menu**. Select **Field Name**. Name the field **Series #**.
- **Click** on the **first record** of the **Series #** field.
- **Type** the number **1**. Press **Enter**. Click on the **Series #** field header to select the column.
- Go to the **Edit Menu**. Select **Fill Series..** Select **number**. Select **Step by 1**.
- The numbers associated with the random numbering will fill down the column.

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